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Technical Report on the Updated Mineral Resource Estimate (MRE4) of the Nalunaq Gold Mine, Greenland

Amaroq Minerals Ltd

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ABBREVIATIONS AND UNITS OF MEASUREMENT

Abbreviation/Unit	Description
%	percent
°	degrees
°C	degrees Celsius
µm	micron(s)
2D	two dimensional
3D	three dimensional
AAS	atomic absorption spectroscopy
Ag	silver
Amaroq	Amaroq Minerals Ltd
Angel Mining	Angel Mining (Gold) A/S
ARC	Arctic Resources Capital S.à.r.l.
Au	gold
Bara	Bara Consulting Ltd
C\$	Canadian dollars
c.	circa
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIP	carbon-in-pulp
cm	centimetres
Crew Gold	Crew Gold Corporation
CRM	certified reference material
CSV	comma separated values
CV	coefficient of variation
Cyprus	Cyprus Greenland Corporation
DCE	Danish Centre for Environment and Energy
DINBK	di-isobutyl ketone
dU	detectORE units
EAMRA	Environmental Agency for Mineral Resource Activities
E-GRG	extended gravity recoverable gold
EIA	Environmental Impact Assessment
ESG	environmental, social and governance
FBC	FBC Mining (Holdings) Limited
g	gram(s)
g/cm ³	grams per cubic centimetre
g/L	grams per litre
g/t	grams per tonne
Ga	billion years ago
GGU	Geological Survey of Greenland (later, GEUS)
GPS	global positioning system
GRG	gravity recoverable gold
HARD	half absolute relative difference
HWV	Hangingwall Vein
ICP-AES	inductively coupled plasma-atomic emission spectroscopy
ICP-MS	inductively coupled plasma-mass spectrometry
ID2	inverse distance squared
ID3	inverse distance cubed

Abbreviation/Unit	Description
IPR	International Peruminas Resources Ltd
JV	joint venture
kg	kilogram(s)
km	kilometres
km ²	square kilometre(s)
KNA	kriging neighbourhood analysis
koz	kilo ounces
kt	kilo tonnes
Kvaerner	Kvaerner Engineering and Construction UK Ltd
kW	kilowatts
kWh/t	kilowatt hours per tonne
Lakefield Research	Lakefield Research Limited
LiDAR	light detection and ranging (survey)
LOD	level of detection
m	metre(s)
m ²	square metre(s)
Ma	million years ago
masl	metres above sea level
mg/L	milligrams per litre
MIBC	methyl isobutyl carbinol
MILT	Ministry of Industry, Labour and Trade
MLSA	Mineral Licence and Safety Authority
mm	millimetres
MMR	Ministry of Mineral Resources
Moz	million ounces
MRDI	Mineral Resource Development International
MRE	Mineral Resource estimate
Mt	million tonnes
MV	Main Vein
NaCN	sodium cyanide
NI 43-101	(Canadian Securities Administrators') National Instrument 43-101
NN	nearest neighbour
NNF	North North Face
OK	ordinary kriging
oz	ounce(s)
ppb	parts per billion
ppm	parts per million
QAQC	quality assurance and quality control
RNGM	Rio Narcea Gold Mines
ROM	run-of-mine
RPEEE	reasonable prospects for eventual economic extraction
SD	standard deviation
SGS	SGS Mineral Services Ltd
SIA	Social Impact Assessment
SRK ES	SRK Exploration Services Limited
t	tonne(s)
t/m ²	tonnes per square metre

Abbreviation/Unit	Description
the Company	Amaroq Minerals Ltd
the Project	Nalunaq Gold Project
US\$	United States dollars
wt. %	weight percent
XRF	x-ray fluorescence

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1 EXECUTIVE SUMMARY

1.1 Introduction

Bara Consulting Ltd (“Bara”) was requested by Amaroq Minerals Ltd (“Amaroq” or the “Company”) to prepare an updated Mineral Resource estimate (MRE) for the Nalunaq Gold Project (“Nalunaq” or the “Project”) in Greenland. This MRE is the only material disclosure set out in this Technical Report.

The MRE is an update from the previous MRE completed by SRK Consulting (UK) Limited in 2022. The purpose of the report is to update with additional drilling and sampling information received since the last report (SRK, 2022) and update the estimate of the Project’s Mineral Resources.

The report has been prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101 (NI 43-101), Companion Policy 43101CP, and Form 43-1010F, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum’s “CIM Definition Standards – For Mineral Resources and Reserves, Definitions and Guidelines” (“CIM Standards”) adopted by the CIM Council on 10 May 2014. This report is effective as of 12 May 2025.

1.2 Property Description

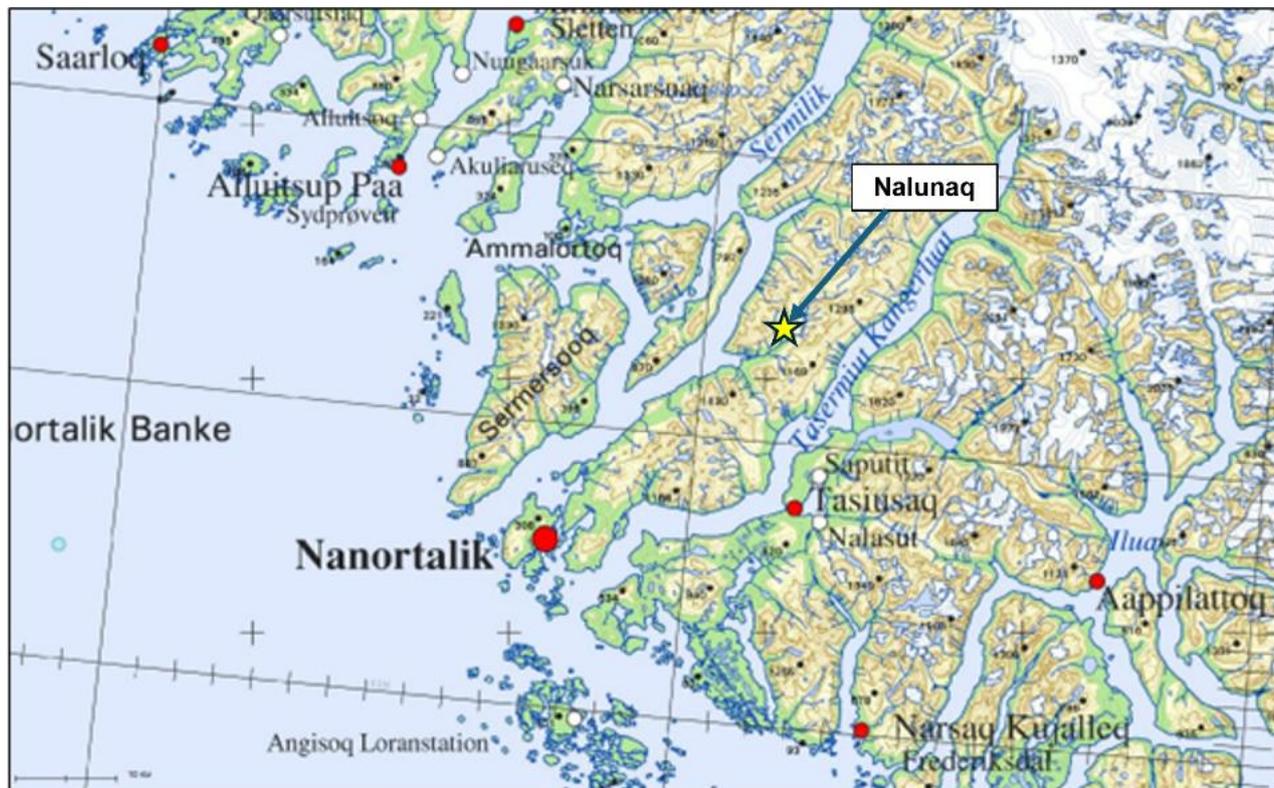
The Nalunaq property is located in southern Greenland at 60°21’N latitude and 44°50’W longitude in the Municipality of Kujalleq. The property is located on the northern side of the Kirkespirdalen Valley, about 33 km northeast of the town of Nanortalik (Figure 1-1 and Figure 1-2).

Figure 1-1 Location of the Project area in Greenland with the area shown in the subsequent figure highlighted by the red box



Map modified from Greenland www.greenmin.gl (Greenmin, 2016)

Figure 1-2 Location of the Nalunaq Gold Project (gold star) in south Greenland



Map source: www.greenmin.gl [Greenmin, 2016]

Greenland is an autonomous country within the Danish Realm. It is the largest island in the world, with an area of 2,166,086 km² although it has a small population of approximately 56,000 people. Most of the island is covered by the Greenland ice sheet, thus the population lives along the coastal fringe which is heavily incised by fjords. Most of the population is located on the west and south coasts and the largest settlement is the capital, Nuuk.

The country is stable with a European-style democracy and maintains strong ties to Denmark. The exploration and mining industry is conducted within a modern mining code (Greenland Parliament Act on mineral activities (Mining Act), 2024; the preceding Mineral Resources Act of 2009 framework is still partially valid with amendments), and the Government is supportive of these activities.

1.3 Accessibility, Climate, Local Resources, Infrastructure and Physiography

Narsarsuaq Airport (113 km or 70 miles north-northwest of Nalunaq) is presently the international access point for south Greenland. International flights from Iceland and Denmark are available, while domestic routes include the capital, Nuuk, and Kangerlussuaq. Most areas in south Greenland can then be accessed either by boat or helicopter (either scheduled or chartered) from Narsarsuaq or Qaqortoq, a nearby larger town en route to site. Typically travel from Narsarsuaq to Nalunaq would be either directly by boat (4 hours), or by taking a helicopter to Nanortalik (1 hour and 10 minutes) and an onward boat (20 minutes). Direct travel to site is also possible by helicopter.

The mine site is located 6 km inland along the Kirkspirdalen Valley from an embayment on the eastern side of Saqqaa Fjord. The topography in the area is rugged to alpine. Steep mountains can reach elevations of 1,500 masl. Many of them are glaciated and the southern tip of the permanent ice sheet is about 33 km to the northeast of the mine. Valley floors and lower mountain sides are covered by typical sub-Arctic vegetation.

The climate of south Greenland is relatively mild for the latitude. In Nanortalik, the closest town to Nalunaq, average temperatures range from around -5°C in January to approximately 7°C in August. Temperatures below 0°C typically occur between November and March. Rainfall is moderate and generally consistent throughout the year, averaging around 8–10 mm per month, although periods of heavier precipitation can occur. Snow cover is likely from October to April, with the possibility of deep accumulations during the winter months. Annual variations may affect the exact timing and intensity of snow and rainfall.

The Nalunaq Project infrastructure currently consists of the following:

- Located at mine area – Nalunaq Mountain:
 - Underground mine
 - Process facility, mobile equipment, and maintenance shops
 - Office/Administration complex
 - Critical spares stores
 - Waste rock management areas
 - Electrical power generation, of substation and distribution
 - Fuel storage.
- Located at beach/mouth of Kirkespir River/Sarqå Fjord:
 - Beach landing area
 - Port jetty
 - 100+ person accommodation camp
 - Wastewater treatment plant
 - Fuel storage (main camp and mine site)
 - Incinerator
 - Material storage areas.

1.4 History

Gold was first reported in the Nalunaq area in 1986 when it was discovered in alluvial settings in the Kirkspirdalen Valley. An exploration licence was granted to NunaOil A/S in 1990, eventually leading to the discovery of the Main Vein at Nalunaq in 1992. Further exploration and drilling confirmed the presence of a continuous mineralised structure hosting high grade, sometimes bonanza grade, gold. Visible gold is common.

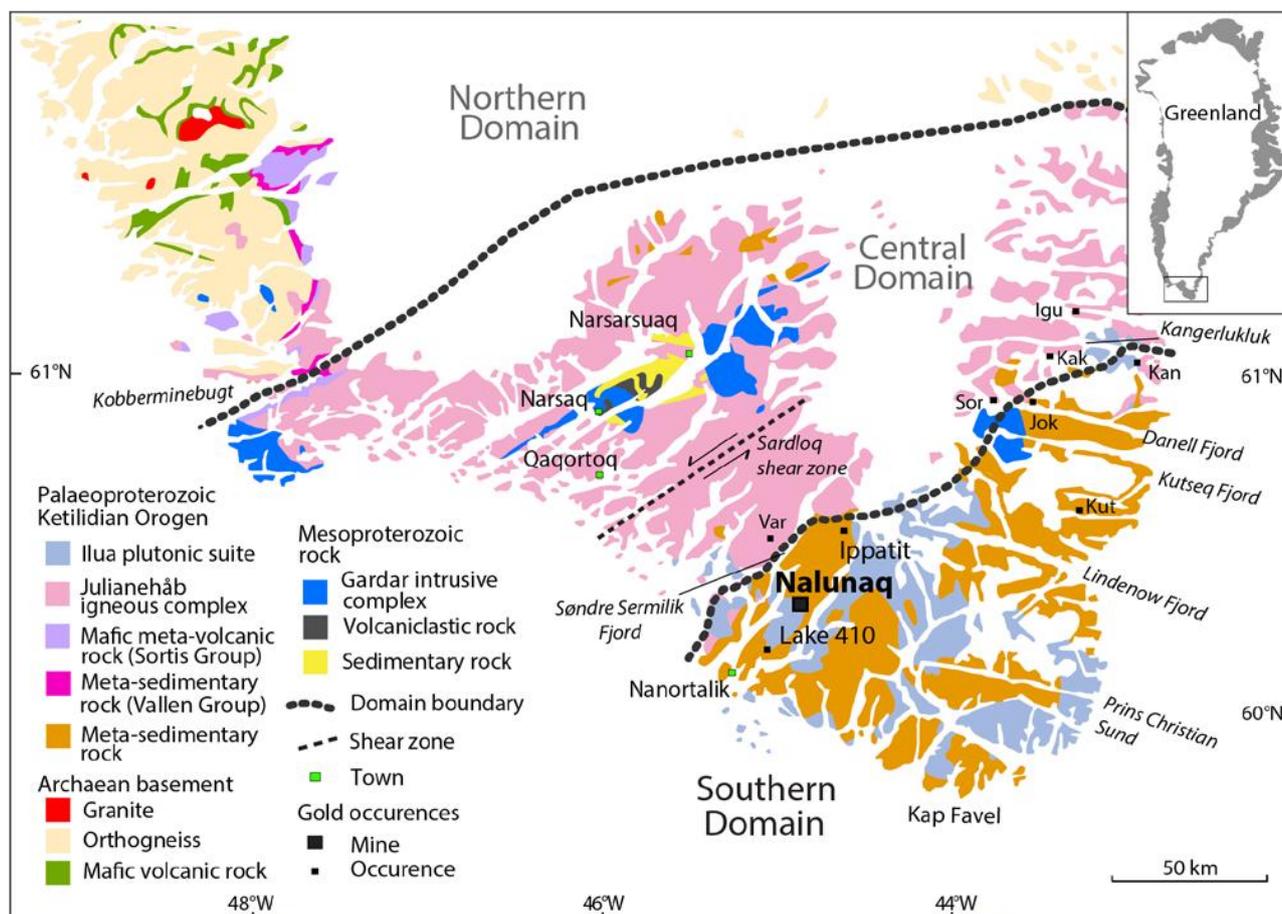
An exploitation licence (MIN 2003-05) was granted to Crew Gold Corporation (“Crew Gold”) in 2003, who undertook mining from 2004 until 2009 with processing carried out offsite; in Spain and later Newfoundland. The Project was then acquired by Angel Mining PLC who operated until closure in 2013, processing material at an underground cyanide plant on site. In total, around 367,130 ounces of gold was produced, 352,307 ounces of gold being from Crew Gold’s operation.

During 2014, the ownership of the exploitation licence was formally transferred from Angel Mining PLC to FBC Mining Limited although it remained in the name of Angel Mining (Gold) A/S (“Angel Mining”). FBC Mining entered a joint venture agreement with Arctic Resources Capital S.à.r.l. (“ARC”) which was approved by the Government of Greenland and signed on 17 July 2015, and the licence is now held in the name of the Greenlandic joint venture company, Nalunaq A/S, as a wholly owned subsidiary of Amaroq.

1.5 Geology

The geology of south Greenland is dominated by a well-exposed and essentially complete transect through the Paleoproterozoic Ketilidian Orogenic Belt, with an age range of c. 1.85–1.73 Ga (Vestergaard et al., 2022). The Ketilidian Orogen is interpreted to have formed due to northwards-dipping oblique subduction of an oceanic plate beneath the Archean North Atlantic Craton, located to the present-day north. Ketilidian accretion and subduction-related magmatism formed a component of the Great Paleoproterozoic Accretionary Orogen, which existed along an active margin spanning Laurentia (south Greenland and North America) and Baltica (northeast Europe), which formed the supercontinent Nuna.

Figure 1-1 Simplified geological map of south Greenland, highlighting the major tectonic (and metallogenic) divisions of the Ketilidian Orogen and associated gold occurrences – Nalunaq is situated in the Southern Domain



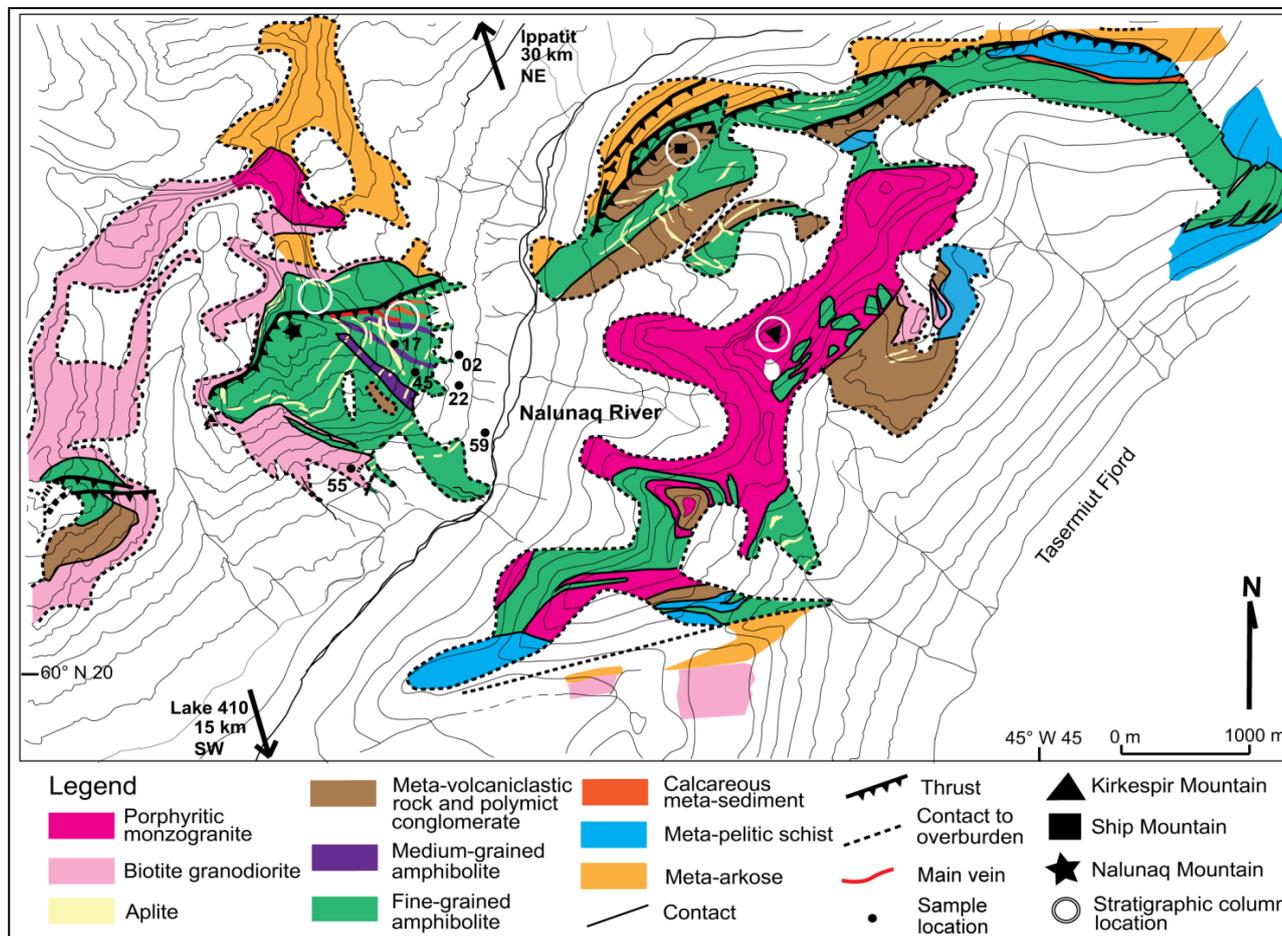
Source: Map taken from Bell (2016)

Abbreviated gold occurrence names are: Igu – Igutsait, Jok – Jokum’s Shear, Kan – Kangerluk, Kak – Kangerluluk, Kut – Kutseq, Sor – Sorte Nunatak, Var – Vagar, modified from Garde et al. (2002), Stendal and Frei (2000); Schlatter and Hughes (2014) and Steenfelt et al. (2016).

The Nalunaq deposit lies within the Psammite Zone in southern Greenland that hosts the Nanortalik Gold Belt (Hughes et al., 2013). This zone is part of the Ketilidian Mobile Belt which evolved between 1850 Ma and 1725 Ma during interpreted northward subduction of an oceanic plate under the southern margin of the Archean North Atlantic Craton.

The geology of the Nalunaq Mountain is dominated by a package of fine- to medium-grained tholeiitic basalt flows and locally coarser, sub-concordant doleritic sills. This package is part of the Nanortalik Nappe and has been thrust over metasediments. The sequence is intruded by later granites and several generations of late aplite and pegmatite dykes.

Figure 1-3 Map of the Kirkespir Valley showing the geology of Nalunaq, Kirkespir and Ship Mountains



Source: Bell, 2016, modified from Petersen, 1993

Note: Locations of the stratigraphic columns shown in the subsequent figure are marked by white circles. Sample locations relate to material taken by Bell (2016) for U/Pb dating.

The main mineralised horizon is represented by the 0.5–2.0 m thick Main Vein, commonly with increased alteration extending for up to 1.0–1.5 m in width on both sides of the vein. The Main Vein slightly crosscuts the foliation and can be traced at surface for over 1 km on the east-facing and north-facing slopes of Nalunaq Mountain, about 250 m across the western face of the mountain, and at least 800 m down the southwestern slopes.

The Main Vein structure varies in width from 0.05 m to 2.00 m, maintains an average dip of 38° towards the southeast, and contains high and sometimes bonanza gold grades (up to 3,777.0 g/t Au over 0.8 m in NQ154, from 92.44 m to 93.24 m). Exposures of the vein in underground development often display pinch and swell structures, show evidence of both compressive and dilatational post-mineralisation deformation, and are cut by late aplitic dykes.

Gold occurs mostly in the native form and locally as the gold-bismuth alloy maldonite and is associated with native bismuth (Grammatikopoulos et al., 2004). Gold fineness ranges from about 800 to 950. Lollingite and arsenopyrite are also observed. Native gold particles range in size from a few microns up to 8 mm, with coarse visible gold being common in the high-grade sections of the Main Vein.

1.6 Exploration

Mineral exploration has been undertaken in the Nalunaq area since the 1970s, initially by the Geological Survey of Greenland, with gold exploration being the predominant focus by various operators

subsequent to the first reports of gold in 1986 by Carl Nielsen A/S. Early exploration campaigns involved stream sediment sampling and geological mapping which resulted in the discovery of the Nalunaq Main Vein. Later exploration campaigns included surface channel sampling of the Main Vein, with the involvement of mountaineers to cover steeper ground, and in recent years hyperspectral imaging techniques and drone photography have also been used to explore for strike extensions to known mineralised structures.

1.7 Drilling

Sixteen surface drilling campaigns have been carried out at Nalunaq since 1993, both prior to and coincident with previous production, with drilling continuing during mining operations by Crew Gold, who carried out underground drilling between 2004 and 2008. Subsequent to the previous production period, Amaroq has completed drilling programs on the property every year since 2017. The aim of these drilling programs has been to better delineate the extents of mineralisation and build confidence in the geological and grade continuity through infill drilling to support MREs. The drilling campaigns are summarised in Table 1-1.

Table 1-1 Summary of drilling campaigns at the Nalunaq Project

Type	Year	Operator	No. of holes	Length of drillholes	% of total metres
Surface DDH	1993	NunaOil/Cyprus Greenland Corp.	13	2,975.4	4.2%
Surface DDH	1995	NunaOil	8	848.3	1.2%
Surface DDH	1998	NunaOil	37	5,131.7	7.2%
Surface DDH	1999	NunaOil	19	2,523.5	3.6%
Surface DDH	2001	NunaOil	13	2,740.6	3.9%
Subtotal	1993–2001	NunaOil/Cyprus Greenland Corp.	90	14,219.5	20.0%
Surface DDH	2004	Crew Gold	12	1,232.5	1.7%
Underground DDH	2004–2008	Crew Gold	237	5,572.0	7.8%
Surface DDH	2005	Crew Gold	56	11,255.5	15.8%
Surface DDH	2006	Crew Gold	15	3,770.5	5.3%
Subtotal	2004–2006	Crew Gold	308	21,830.5	30.7%
Surface DDH	2017	Amaroq	14	2,444.9	3.4%
Surface DDH	2018	Amaroq	18	3,831.7	5.4%
Surface DDH	2019	Amaroq	9	1,764.6	2.5%
Surface DDH	2020	Amaroq	10	2,041.1	2.9%
Surface DDH	2021	Amaroq	51	11,023.7	15.5%
Surface DDH	2022	Amaroq	45	8,978.7	12.6%
Surface DDH	2023	Amaroq	6	1,731.4	2.4%
Surface DDH	2024	Amaroq	11	2,985.8	4.2%
Underground DDH	2024	Amaroq	5	229.8	0.3%
Subtotal	2017–2024	Amaroq	169	35,031.7	49.3%
TOTAL	1993–2024	All companies	579	71,081.6	100.0%

Bara is overall satisfied with the drill spacing and quality of the drilling programs carried out at Nalunaq in order to assess the mineralisation continuity and tenor and as inputs into an MRE.

1.8 Sample Preparation, Analyses and Security

Sampling at the Nalunaq Project includes historical sampling prior to 2006 (surface rock sampling, channel sampling, drilling, and underground sampling), underground sampling and drilling during

historical mining operations, surface sampling between 2015 and 2024, drilling between 2017 and 2019, drilling in 2020, drilling between 2021 and 2024, and underground sampling during current mining operations.

1.9 Data Verification

As part of the process of updating the MRE for Nalunaq “MRE4”, the majority of the data verification undertaken by Bara was on the new data acquired as part of the 2023 and 2024 drilling seasons. Bara reviewed the three previous iterations of the Mineral Resource that had been estimated by international consulting firm SRK and considered that historical data had largely been validated to an appropriate standard to be included in an MRE. This previous review work included review of previous quality assurance and quality control (QAQC) and assessments of bias between sample methods and concluded the data was suitable for inclusion in an MRE.

The Qualified Person, Mr James McFarlane, visited the site, along with Senior Geology Consultant, Zoe Scannell, between 6 and 10 August 2024. This visit included onsite verification of the drilling and data collection for the additional data incorporated into this MRE.

The current drilling database, that includes all drilling data alongside underground and surface chip and channel samples was provided by Amaroq to Bara within a Leapfrog project, and several checks were carried out of the data that progressed into the MRE.

The Qualified Person is of the opinion that the data provided to inform the MRE is of adequate quality and valid for use.

1.10 Mineral Processing and Metallurgical Testwork

Significant metallurgical testwork has been completed on ore samples from various parts of the deposit throughout the course of the Project history. Detailed summaries of historical testwork prior to Amaroq’s ownership of the Project can be found in the 2002 feasibility study completed for Crew Gold (Kvaerner, 2002). SGS carried out cyanide leaching testwork on a Nalunaq ore sample for Angel Mining Plc in 2011. Two metallurgical samples were collected underground in 2016 by SRK Exploration Services (“SRK ES”) and analysed for gold content at SGS Minerals Services Ltd (“SGS”) in Cornwall, UK. These samples were used for additional gravity and flotation testwork in 2020, which has been used alongside historical testwork to design the current processing flowsheet.

Gold ore at Nalunaq contains a high proportion of coarse gold which is recoverable using gravity methods. Other heavy minerals such as arsenopyrite, löllingite, iron and copper sulphides are also present in mineralised material and are included in the gravity concentrates. Testwork supports flotation as a viable method to recover additional gold.

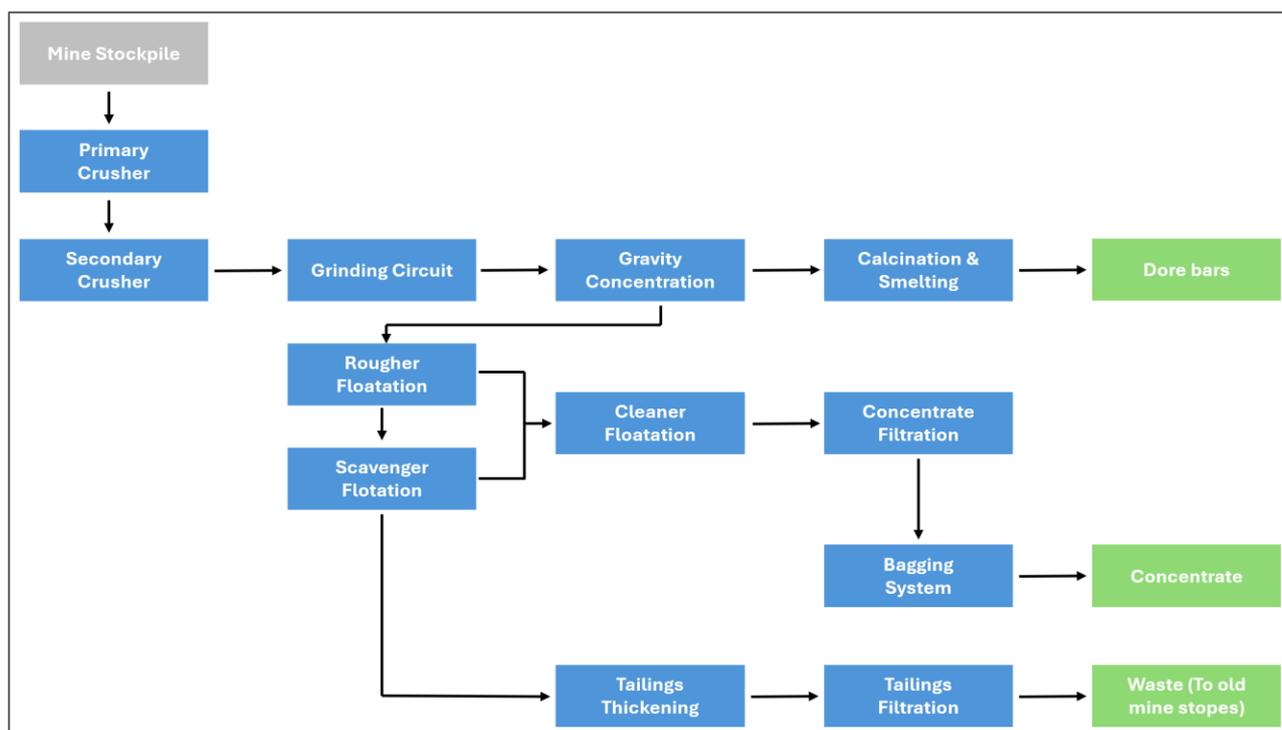
Current and planned processing facilities comprise the following main systems:

- Crushing
- Dust collection
- Grinding
- Gravity recovery
- Flotation circuit
- Tailings thickening
- Tailings filtering
- Gold room (used for smelting the gravity concentrate into doré).

The process flow is developed around the high propensity of the gold at Nalunaq to be recovered in a gravity concentration circuit, calculated from previous testwork to be in the order of 65–75%. An additional 20–25% of the gold in the remaining slurry will be recovered by the flotation circuit downstream of the gravity concentration circuit.

A block diagram of the processing process flow is presented in Figure 1-4.

Figure 1-4 Block diagram of the processing process flow



Source: Amaroq

1.11 Mineral Resource Estimate

Bara has collated all the available information from Amaroq as well as legacy and previous NI 43-101 reports to prepare an updated MRE in accordance with CIM standards. The MRE (“MRE4”) and accompanying Statement is the responsibility of the Qualified Person, Mr James McFarlane.

All geological wireframe models of the Nalunaq Project and used in this estimate were produced by the Amaroq geological and reviewed by Bara. Should there be any changes to the interpretation suggested by Bara, this was discussed with and subsequently incorporated by Amaroq to produce the finalised wireframes. The prior approach to better represent the distribution of very high-grade areas within the Main Vein by utilising sub-domains was reviewed and enhanced by Bara by incorporating an additional sub-domain for the Mountain Block and by moving to a soft boundary to the domains to better represent the continuity of mineralisation at the deposit.

Bara’s approach to developing the updated MRE at Nalunaq can be broadly summarised by the following work stages:

- Database review and verification
- Review and verification of wireframe geological models in Leapfrog Geo (with the Edge extension for estimation) version 2024.1 software
- Statistical analysis and definition of domains
- Geostatistical analysis (variography) within estimation domains

- Block modelling and grade interpolation using Leapfrog Edge software
- Model validation
- Mineral Resource classification
- Cut-off grade assessment to provide reasonable prospects for eventual economic extraction (RPEEE)
- Mineral Resource Statement reporting.

The Nalunaq Mineral Resource Statement, 23 February 2025, is depleted to reflect the most up to date available depletion solid, and includes:

- Indicated Mineral Resources of 151,500 tonnes at a mean grade of 32.4 g/t Au for 158,000 ounces of gold
- Inferred Mineral Resources of 348,000 tonnes at a mean grade of 29.2 g/t Au for 326,000 ounces of gold
- Total Indicated and Inferred Mineral Resource, reported as depleted and above 5.9 g/t Au at 500,000 tonnes at 30.1 g/t Au for 484,000 ounces of gold.

The MRE4 Bara 2025 Mineral Resource Statement for the Nalunaq deposit is shown in Table 1-2.

Table 1-2 MRE4 Nalunaq Mineral Resource Statement as of 23 February 2025

Classification	Tonnage (t)	Gold grade (g/t)	Gold content (koz)
Indicated	151,500	32.4	158
Inferred	348,000	29.2	326

Notes:

- The above figures are rounded and may therefore not directly align with previous public disclosure by Amaroq Minerals Ltd.
- Mineral Resources as reported above have an effective date of 23 February 2025 and have been depleted to reflect depletion solids received from Amaroq on this date.
- Mineral Resources are undiluted and reported above a cut-off grade of 5.9 g/t Au, using a gold price of US\$2,100/oz and inputs best reflect the reasonable prospects for eventual economic extraction, understood by the Qualified Person at the time of writing.
- Mineral Resources are not Mineral Reserves and have not demonstrated economic viability.
- The Qualified Person for the declaration of the Mineral Resources is Mr James McFarlane, MCSM CGeol CEng FIMMM QMR RPGeo FIQ, of Bara. The MREs and accompanying statements were produced and reviewed within the wider Bara team of consultants,
- A site visit was conducted by the Qualified Person in August 2024.
- Mineral Resources are reported in accordance with the CIM Definition Standards.

1.12 Adjacent Properties

Amaroq current operate 13 exploration licences away from the Nalunaq Mine across southern Greenland. These are held by either Nalunaq A/S (six) a 100% owner subsidiary concentrating on gold exploration, or Gardaq A/S (seven) a 51% controlled subsidiary prioritising the exploration of non-gold critical and strategic metal projects. Collectively, Amaroq operates across 6,849.2 km² of southern Greenland centred on one or other of the Nanortalik Gold Belt, the South Greenland Copper Belt and the Gardar Igneous Province.

Table 1-3 Table of Amaroq controlled exploitation and exploration licences in southern Greenland

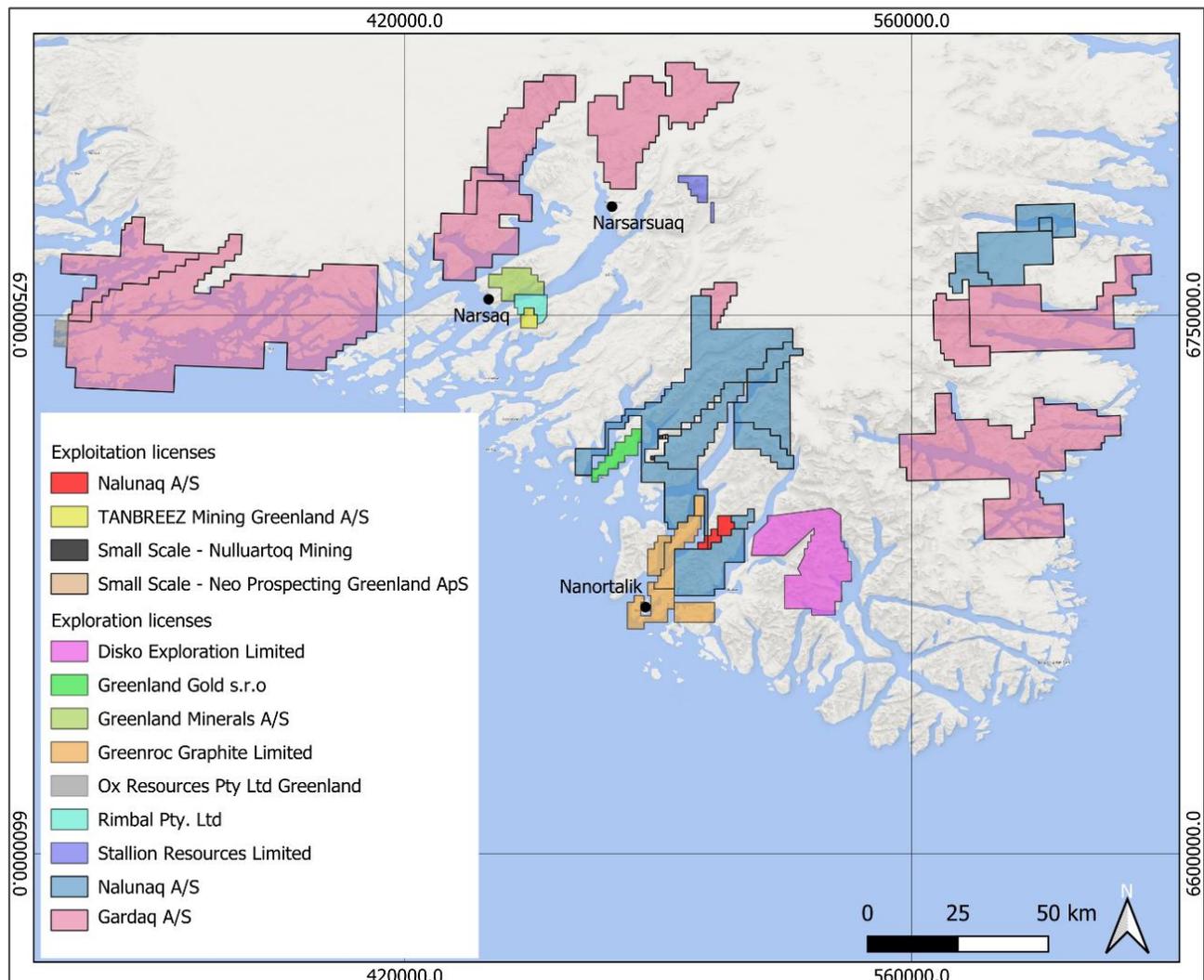
Licence	Holding company	No.	Area	Type	Expiry date
NALUNAQ	Nalunaq A/S	MIN 2003-05	33.7	Exploitation	24 Apr 2033
VAGAR	Nalunaq A/S	MEL 2006-10	221	Exploration	31 Dec 2026
TARTOQ	Nalunaq A/S	MEL 2015-17	78	Exploration	31 Dec 2026

Licence	Holding company	No.	Area	Type	Expiry date
NANOQ (NUNA NUTAAQ)	Nalunaq A/S	MEL 2019-113	244.45	Exploration	31 Dec 2025
ANORITOOQ	Nalunaq A/S	MEL 2020-36	1,184.93	Exploration	31 Dec 2026
SIKU	Nalunaq A/S	MEL 2022-08	251	Exploration	31 Dec 2026
SAARLOQ	Gardaq A/S	MEL 2020-31	63.91	Exploration	31 Dec 2026
NORTH SAVA	Gardaq A/S	MEL 2020-41	332.99	Exploration	1 Mar 2026
SAVA (KANGERLUARSUK)	Gardaq A/S	MEL 2021-02	384	Exploration	31 Dec 2026
STENDALEN	Gardaq A/S	MEL 2021-11	1,377.16	Exploration	1 Mar 2026
KOBBERMINEBURGT	Gardaq A/S	MEL 2022-01	220	Exploration	31 Dec 2026
PAATASOQ WEST	Gardaq A/S	MEL 2023-69	199	Exploration	31 Dec 2027
NUNARSUIT	Gardaq A/S	MEL 2023-70	1,592.52	Exploration	31 Dec 2027
JOHAN DAHL LAND	Nalunaq A/S	MEL 2025-17	666.52	Exploration	1 Jan 2028

Note: Johan Dahl Land, currently held by Nalunaq A/S but under application to transfer ownership to Gardaq A/S.

In addition to the Amaroq controlled licences in the immediate area, there are four adjacent properties to the current Amaroq assets. These, and other licences held across the wider south of Greenland, are illustrated in Figure 1-5 below.

Figure 1-5 Map showing adjacent mineral exploration properties across southern Greenland



Source: Amaroq

Amaroq is aware of several pending applications within this area, however, information regarding the applying companies are currently not known.

1.13 Interpretations and Conclusions

Nalunaq displays classic attributes of a high-grade, narrow-vein orogenic gold deposit. The Project has a combination of data sources from legacy production data, historical and more recent surface and underground drilling campaigns, as well as surface mountain sampling to help delineation of the vein extents, plus grade continuity and tenor assessments.

Bara has produced an updated MRE with an accompanying Mineral Resource Statement as part of this technical report. The Qualified Person for the MRE is Mr James McFarlane, MCSM CGeol CEng FIMMM QMR RPGeo FIQ.

The Nalunaq Mineral Resource Statement is reported above a cut-off grade of 5.9 g/t Au with an effective date of 23 February 2025. The cut-off grade has been calculated based on economic input parameters and the detailed assessment by the Qualified Person and Bara consultants from inputs provided by Amaroq.

The Nalunaq Mineral Resource Statement, 23 February 2025, is depleted to reflect the most up to date available depletion solid, and includes:

- Indicated Mineral Resources of 151,500 tonnes at a mean grade of 32.4 g/t Au for 158,000 ounces of gold
- Inferred Mineral Resources of 348,000 tonnes at a mean grade of 29.2 g/t Au for 326,000 ounces of gold
- Total Indicated and Inferred Mineral Resource, reported as depleted and above 5.9 g/t Au at 500,000 tonnes at 30.1 g/t Au for 4834,000 ounces of gold
- There are no Measured Resources declared.

The MRE4 Bara 2025 Mineral Resource Statement for the Nalunaq deposit is shown in Table 1-2 above.

Key changes in this MRE from the previous (MRE3) can be summarised as follows:

- Additional drilling and sampling. An additional 13,768 m of drilling from 61 surface and 4 underground holes was drilled during the 2022, 2023, 2024 field seasons. Of this, 59 surface holes and 2 underground holes contained samples that informed the MRE for 13,410 m. Samples from two underground holes were not received in time for the data cut-off in MRE4 and two of the 2022 surface holes drilled did not intercept Main Vein.
- Additional underground face and channel sampling added an additional 63 channel samples and 274 chip samples – primarily from underground production faces.
- The use of soft boundaries with 10 m range on estimation domains, as opposed to hard boundaries, has enabled a more consistent estimation and more appropriate grade gradation between high-grade and low-grade areas.

An increase from 355 kt to 500 kt represents a 41% increase in tonnage from MRE3 to MRE4, and a 51% increase in contained metal (ounces of gold). This is largely due to extending the classified areas into areas of additional drilling in the 2022–2024 drilling and sampling campaigns, as well as allowing a continuation of grade between domains due to soft boundary analysis. The latter is felt by the Qualified Person to be more representative of the grade continuity of the vein, given it is largely a single vein system that does not exhibit natural hard boundaries.

Bara also notes consistencies with the previous MRE that have been reviewed and deemed suitable for continuation. These include the inclusion of underground and surface chip and channel samples alongside drilling, the use of capping and high-grade clamping to restrict the smearing of higher grade whilst honouring their existence within this high-grade deposit and the continued usage of a density value of 2.96 t/m³ from the data currently available.

1.14 Recommendations

Bara recommends the following areas for improvement in order to expand the confidence in the geological model and enhance future estimates of Mineral Resources:

- Hangingwall and footwall sampling around the vein in order to better understand the potential hangingwall and footwall mineralisation tenor allowing a more appropriate approach to dilution around the Main Vein to be developed for mining purposes.
- Additional sampling for density testwork – not only for better density delineation of the mineralised vein but of the hangingwall and footwall immediate to Main Vein also. Additional samples should be considered to quantify the density variability with increased levels of alteration within mineralised vein zones. Additional density testwork should also include additional veins that may become significant as part of future resources and exploration targets such as 75 Vein.
- Review and interrogate reconciliation data – including additional detail in legacy and archived material as well as ongoing reconciliation systems review as the mine goes into production with an active mine-mill system.
- Review previous drilling at Main Vein predicted horizon where mineralisation was not identified and where an intersection was expected.
- Continue re-sampling campaign for hangingwall and footwall structures where previously un-sampled vein material and potential mineralisation occurs.
- Consider estimating a diluted model – this should include a review of the suitability of such a model as the project moves into a production phase as well as the availability and quality of data to support this (i.e. hangingwall and footwall information).
- Studies and work programs to advance towards a maiden Ore Reserve estimate. This will likely include gap analysis of the current information and work programs ongoing for reserve definition and assignment of a suitable Qualified Person to carry this out. In addition, there will be 2025 drilling priorities to assess as well as engineering studies to support. An estimate of costs has been provided by Amaroq.

Bara has been made aware of Amaroq's planned exploration activities at Nalunaq for 2025, which is understood to include resource definition in Mountain Block and Target Block and additional drilling in Valley Block. The focus of these areas will be with a view to short-term resource growth and definition with the potential for future Ore Reserve estimate. Additional holes are likely to be undertaken for longer-term resource growth.

This additional data will be complemented by ongoing underground grade control drilling and face sampling which forms part of the mine operating expenditure.

2 INTRODUCTION

2.1 Terms of Reference

Bara Consulting Ltd (“Bara”) was requested by Amaroq Minerals Ltd (“Amaroq” or the “Company”) to prepare an updated Mineral Resource estimate (MRE) for the Nalunaq Gold Project (“Nalunaq” or the “Project”) in Greenland.

The MRE is an update from the previous MRE completed by SRK Consulting (UK) Ltd in 2022. The purpose of the report is to update with additional drilling and sampling information received since the last report (SRK, 2022) and update the estimate of the Project’s mineral resources.

The report has been prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101 (NI 43-101), Companion Policy 43101CP, and Form 43-1010F, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum’s “CIM Definition Standards – For Mineral Resources and Reserves, Definitions and Guidelines” (“CIM Standards”) adopted by the CIM Council on 10 May 2014. This report is effective as of 12 May 2025.

As defined in Part 1.1 of NI 43-101, an “advanced property” means a property that has:

- Mineral Reserves, or
- Mineral Resources, the potential economic viability of which is supported by a preliminary economic assessment, a pre-feasibility study or a feasibility study.

The Nalunaq Gold Mine does not currently have Mineral Reserves and neither this MRE (or the previous three MREs prepared for the current operators, Amaroq) have had the potential economic viability assessed by means of a preliminary economic assessment, a pre-feasibility study or a feasibility study. As such, the property cannot be considered an advanced property under NI 43-101.

Furthermore, this technical report is not required to include disclosure under Sections 15 to 22, however, where possible, relevant disclosure is included under other sections as appropriate.

2.2 Sources of Information and Data

Bara’s report enclosed herein is based upon information received from Amaroq in the form of raw data and technical reports, as well as information gleaned from the site visit – including the Qualified Person’s own observations as well as discussions with technical personnel from Amaroq. The latter discussions and sharing of information pertinent to the report enclosed occurred via frequent online meetings as well as the site visit.

The key sources of information include:

- Drilling and sampling database – including collar, surveys, assay and relevant lithology files
- Additional drilling logging database files – may include alteration, structural information and mineralisation
- Details for samples taken for density measurements and testwork
- Quality assurance and quality control (QAQC) database including sample IDs and control sample types (i.e. blanks, certified reference materials (CRMs), duplicates)
- Three-dimensional (3D) files – namely topography, mineralisation wireframes, underground surveys, relevant fault and intrusion structures

- Internal as well as external technical reports – including Amaroq geologists’ interpretation of the deposit geology and supporting information and interpretation relevant to the enclosed report
- Site visit – observations from the Qualified Person as well as discussions with relevant site team.

2.3 Capability and Independence of Consultant

This report was compiled by Mr James McFarlane (BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ) is acting as Qualified Person and Ms Zoe Scannell (BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM), both of whom are consultants with Bara , an independent geological, engineering, processing and environmental, social and governance (ESG) focused consulting firm providing services to the international mining sector.

Neither Bara nor any of its consultants employed in the preparation of this report has any material present or contingent interest in the outcome of this report or in the asset being assessed. Nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of Bara. Bara will be paid a fee for the preparation of this report in accordance with normal consulting practice.

The individuals who have provided input to this report, and who are listed above, have extensive experience in the mining industry including in orogenic gold deposits of this nature and are members in good standing of appropriate professional institutions.

2.4 Site Visit

Mr James McFarlane is acting as Qualified Person for the enclosed NI 43-101 report. The MRE statement that is presented has an effective date of 23 February 2025 and is signed off by the Qualified Person. A site visit was carried out by Mr James McFarlane and Ms Zoe Scannell between 6 and 10 August 2024. The site visit included:

- Viewing surface infrastructure, underground mining area – including active headings and legacy stoped and developed areas
- Verification of several collar locations from recent drilling campaigns
- Viewing the core shed area that contained holes being actively logged from the 2024 drilling campaign – including mineralised sections for Qualified Person review, as well as discussions with the geologists logging the core as to the process and procedure for geological and geotechnical logging, sample selection, sample preparation and the procedure for dropping off to the onsite and offsite laboratory
- Discussions with Amaroq’s technical services team
- Review of relevant sample logging and preparation procedures as well as mining related procedures from Amaroq and contract miner, Thyssen Schachtbau.

3 RELIANCE ON OTHER EXPERTS

This report has been prepared under the supervision of Mr James McFarlane (BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ). Mr McFarlane is a consultant of Bara (Principal Consultant (Mining & Geology)) and is acting as the Qualified Person for the purposes of this Technical Report.

Mr McFarlane holds a BSc with Honours from the University of Wales, Aberystwyth in Environmental Earth Science and an MSc in Mining Geology from Camborne School of Mines, University of Exeter. He is also a Master of the Camborne School of Mines (MCSM). Mr McFarlane is a Fellow and Chartered Geologist with the Geological Society of London (CGeol FGS), a Chartered Engineer (CEng) and Fellow of the Institute of Materials, Minerals and Mining (FIMMM) through which he is also Qualified for Minerals Reporting (QMR). Mr McFarlane is a Member of the Australian Institute of Geoscientists (MAIG), and through which is a Registered Professional Geoscientist in the joint fields of Mining and Mineral Exploration (RPGeo). He is also a Fellow of the Institute of Quarrying (FIQ).

Mr McFarlane has sufficient experience with the commodity, style of mineralisation and deposit type under consideration to qualify as a Qualified Person as defined by NI 43-101 Standards of Disclosure for Mineral Projects. Mr McFarlane consents to the inclusion in this report of the contained technical information relating the Mineral Resource estimation in the form and context in which it appears.

3.1 Additional Contributing Qualified Persons (Other Experts)

As part of the development of this Technical Report, Mr McFarlane has relied on additional contributing qualified persons (Other Experts) who have contributed to various parts of the report. A full responsibility matrix for the report is provided in Table 3-1.

3.1.1 Independent Qualified Persons

The sections within this report relating to Introduction (2), Data Verification (12), Mineral Resource Estimates (14), Interpretation and Conclusions (25) and Recommendations (26) have been generated in collaboration with Ms Zoe Scannell (BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM).

Ms Scannell is a consultant of Bara (Principal Geological Consultant) and holds a BSc with Honours from Durham University in Geology and an MSc in Mining Geology from Camborne School of Mines, University of Exeter. She is also a Master of the Camborne School of Mines (MCSM). Ms Scannell is a Fellow of the Geological Society of London (FGS) and a Member of the Institute of Materials, Minerals and Mining (MIMMM) through which she is also Qualified for Minerals Reporting (QMR). Ms Scannell is also a Member of the Australian Institute of Mining and Metallurgy (MAusIMM).

3.1.2 Non-Independent Qualified Persons

Due to the collaborative approach taken in the generation of this Technical Report, several sections were authored by Amaroq staff, who cannot therefore be considered independent.

The sections within this report relating to Adjacent Properties (23) have been generated in collaboration with Mr James Gilbertson.

Mr Gilbertson is the Vice President Exploration for Amaroq and has worked within the mineral exploration and mining industry for the last 25 years. He holds a BSc with Honours from Durham University in Geology and an MSc in Mining Geology from Camborne School of Mines, University of Exeter and is also a Master of the Camborne School of Mines (MCSM). Mr Gilbertson is a Fellow of the Geological Society of London (FGS) as well as being a Chartered Geologist (CGeol).

The sections within this report relating to History (6), Exploration (9), Drilling (10), Sample Preparation, Analyses and Security (11), Data Verification (12) and Mineral Processing and Metallurgical Testing (13) have been generated in collaboration with Mr Will Gray who is the Exploration Manager for Amaroq. Mr Gray holds a BSc with Honours from the University of St Andrews and an MSc in Mining Geology from Camborne School of Mines, University of Exeter. He is also a Master of the Camborne School of Mines (MCSM).

The sections within this report relating to Property, Description and Location (4), Accessibility, Climate, Local Resources, Infrastructure and Physiography (5), Geological Setting and Mineralisation (7) and Deposit Types (8) have been generated in collaboration with Dr James Stratford who is a Senior Geologist with Amaroq. Dr Stratford holds a BA (Mod.) in Geology and a PhD in the petrography and geochemistry of orogenic gold systems, both from Trinity College, Dublin. Dr Stratford is a Professional Geologist (P.Geol) licensed by the Institute of Geologists of Ireland (IGI), a European Geologist (EurGeol) with the European Federation of Geologists (EFG), and is a Fellow of the Society of Economic Geologists (FSEG).

Table 3-1 Responsibility matrix for the Technical Report

Section	Title	Author(s)	Reviewer(s)	Qualified Person(s)
1	Summary	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
2	Introduction	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
3	Reliance on Other Experts	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
4	Property, Description and Location	James Stratford, BA (Mod.) (Dubl.), Ph.D (Dubl.), P.Geo, EurGeol, FSEG	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
5	Accessibility, Climate, Local Resources, Infrastructure and Physiography	James Stratford, BA (Mod.) (Dubl.), Ph.D (Dubl.), P.Geo, EurGeol, FSEG	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
6	History	Will Gray, BSc (Hons), MSc, MCSM	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
7	Geological Setting and Mineralisation	James Stratford, BA (Mod.) (Dubl.), Ph.D (Dubl.), P.Geo, EurGeol, FSEG.	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ

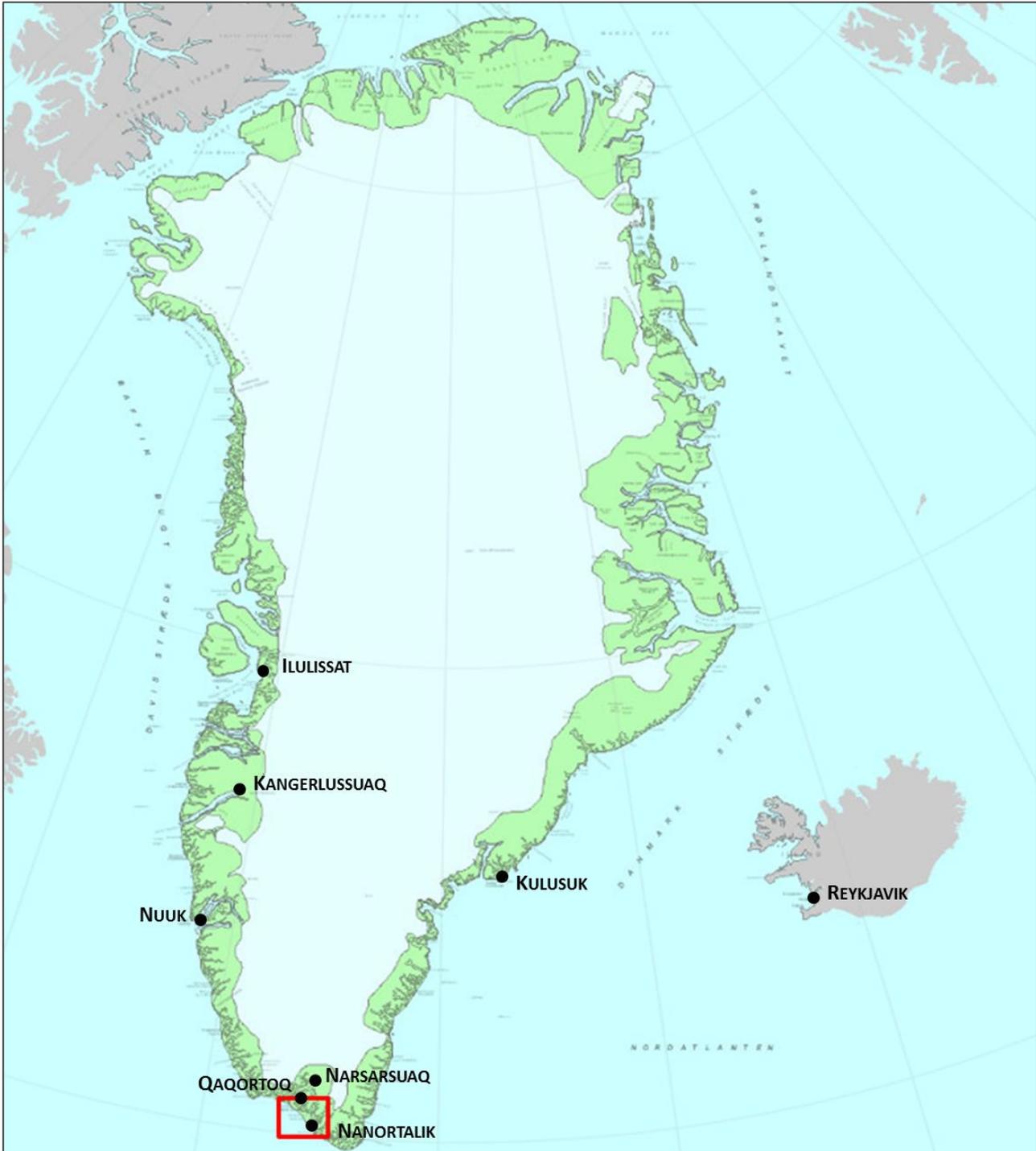
Section	Title	Author(s)	Reviewer(s)	Qualified Person(s)
8	Deposit Types	James Stratford, BA (Mod.) (Dubl.), Ph.D (Dubl.), P.Geo, EurGeol, FSEG.	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
9	Exploration	Will Gray, BSc (Hons), MSc, MCSM	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
10	Drilling	Will Gray, BSc (Hons), MSc, MCSM	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
11	Sample Preparation, Analyses and Security	Will Gray, BSc (Hons), MSc, MCSM	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
12	Data Verification	Will Gray, BSc (Hons), MSc, MCSM & Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
13	Mineral Processing and Metallurgical Testing	Will Gray, BSc (Hons), MSc, MCSM	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ

Section	Title	Author(s)	Reviewer(s)	Qualified Person(s)
14	Mineral Resource Estimates	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
15	Mineral Reserve Estimates	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
16	Mining Methods	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
17	Recovery Methods	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
18	Project Infrastructure	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
19	Market Studies and Contracts	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
20	Environmental Studies, Permitting and Social or Community Impact	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
21	Capital and Operating Costs	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
22	Economic Analysis	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
23	Adjacent Properties	James Gilbertson, BSc (Hons), MSc, MCSM, FGS, CGeol	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM & James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
24	Other Relevant Data and Information	This section is not applicable to this report	This section is not applicable to this report	This section is not applicable to this report
25	Interpretation and Conclusions	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ
26	Recommendations	Zoe Scannell, BSc (Hons), MSc, MCSM, FGS, QMR MIMMM, MAusIMM	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ	James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME, CEng QMR FIMMM, RPGeo MAIG, FIQ

4 PROPERTY DESCRIPTION AND LOCATION

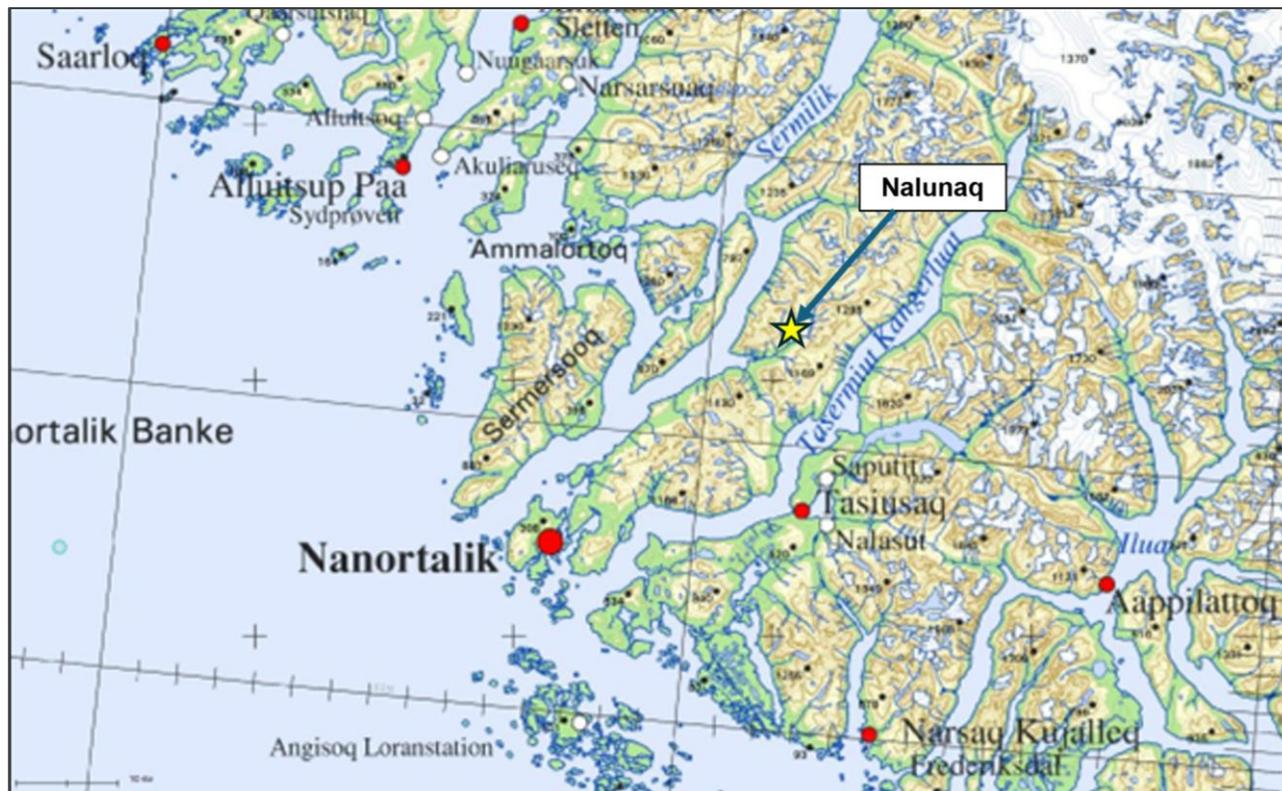
The Nalunaq property is located in southern Greenland at 60°21'N latitude and 44°50'W longitude in the Municipality of Kujalleq. The property is located on the northern side of the Kirkespirdalen Valley, about 33 km northeast of the town of Nanortalik (Figure 4-1 and Figure 4-2).

Figure 4-1 Location of the project area in Greenland with the area shown in Figure 4-2 highlighted by the red box



Source: Map modified from Greenland www.greenmin.gl (Greenmin, 2016)

Figure 4-2 Location of the Nalunaq Gold Project (gold star) in southern Greenland



Map source: www.greenmin.gl [Greenmin, 2016]

Greenland is an autonomous country within the Danish Realm. It is the largest island in the world with an area of 2,166,086 km² although it has a small population of approximately 56,000 people. Most of the island is covered by the Greenland ice sheet, thus the population lives along the coastal fringe which is heavily incised by fjords. Most of the population is located on the west and south coasts and the largest settlement is the capital, Nuuk.

The country is stable with a European-style democracy and maintains strong ties to Denmark. The exploration and mining industry is conducted within a modern mining code (Greenland Parliament Act on mineral activities (Mining Act), 2024; the preceding Mineral Resources Act of 2009 framework is still partially valid with amendments), and the Government is supportive of these activities.

4.1 Licences, Permits and Ownership

4.1.1 Licence Details

The mine which forms the focus of the Nalunaq Project is located in the centre of exploitation licence MIN 2003.05 which covers an area of 33.69 km² (Figure 4-3). The exploitation licence grants Nalunaq A/S (a wholly owned Greenlandic subsidiary of Amaroq) the exclusive right to undertake mineral exploration and exploitation within the licence area, subject to approval (see Section 4.3). The boundary coordinates for the Nalunaq exploitation licence are given in Table 4-1.

Figure 4-3 Location of the Nalunaq exploitation licence MIN 2003.05 (purple area highlighted with a yellow outline) and neighbouring exploration licences (purple areas with a thin white outline)

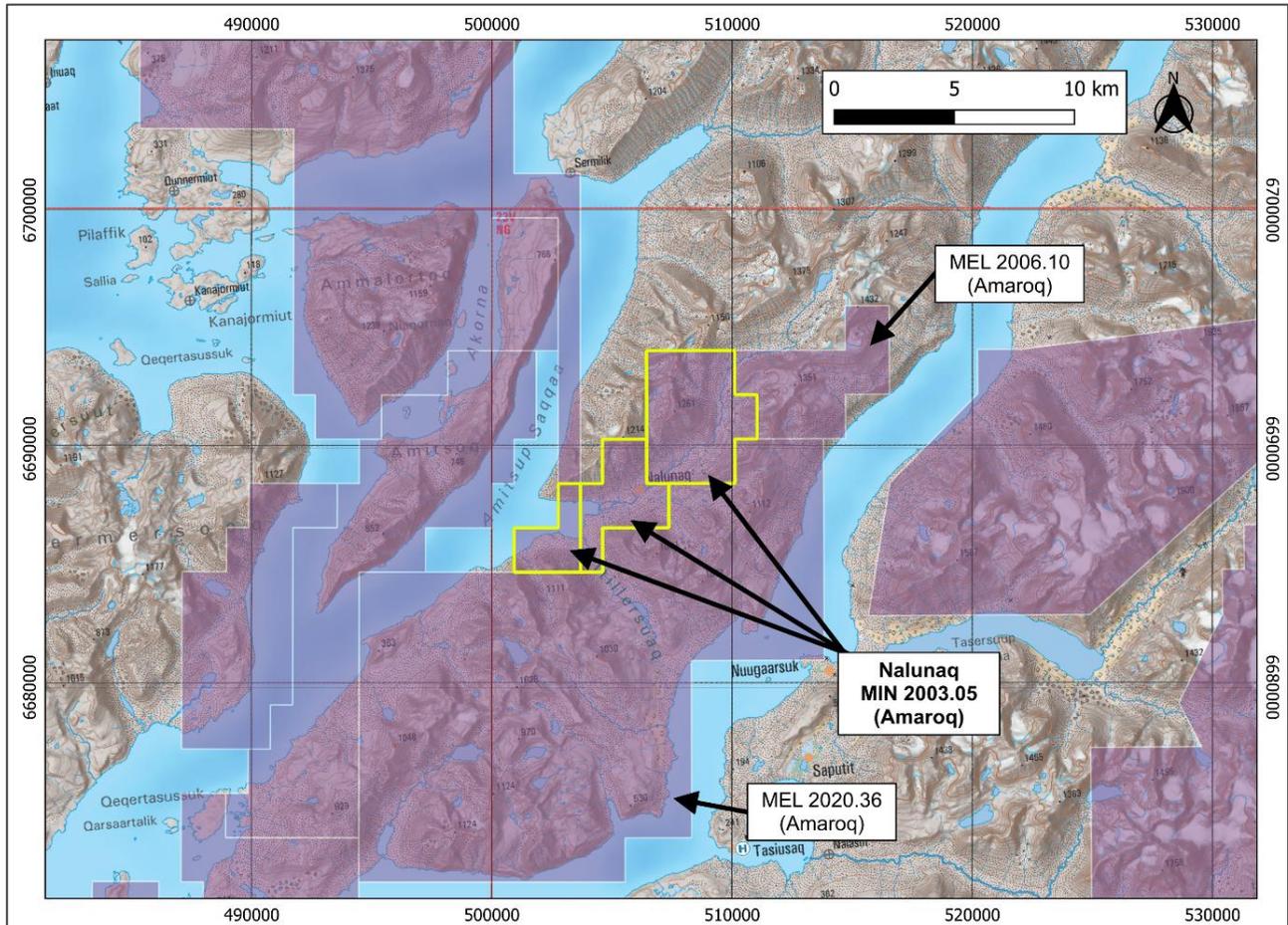


Image source: www.greenmin.gl (accessed 2025)

Note: The licences abutting Nalunaq to the east (MEL 2006.10) and south (MEL 2020.36) are also owned by Nalunaq A/S (marked here as 'Amaroq').

Table 4-1 Boundary coordinates for exploitation licence MIN 2003.05

Vertex	Latitude WGS84			Longitude WGS84		
	Degrees N	Min	Direction	Degrees W	Min	Direction
a	60	23	N	44	53	W
b	60	23	N	44	49	W
c	60	22	N	44	49	W
d	60	22	N	44	48	W
e	60	21	N	44	48	W
f	60	21	N	44	49	W
g	60	20	N	44	49	W
h	60	20	N	44	53	W
i	60	23	N	44	53	W
j	60	21	N	44	55	W
k	60	21	N	44	53	W
l	60	20	N	44	53	W
m	60	20	N	44	52	W
n	60	19	N	44	52	W

Vertex	Latitude WGS84			Longitude WGS84		
	Degrees N	Min	Direction	Degrees W	Min	Direction
o	60	19	N	44	55	W
p	60	18	N	44	55	W
q	60	18	N	44	56	W
r	60	20	N	44	56	W
s	60	20	N	44	55	W
t	60	21	N	44	55	W
u	60	20	N	44	57	W
v	60	20	N	44	56	W
w	60	18	N	44	56	W
x	60	18	N	44	59	W
y	60	19	N	44	59	W
z	60	19	N	44	57	W
aa	60	20	N	44	57	W

Source: *greenmin.gl*, 2025

4.1.2 Previous Ownership

The licence was granted to Crew Gold Corporation (“Crew Gold”) in April 2003 and is valid until 24 April 2033. Angel Mining PLC, through their wholly owned Greenlandic subsidiary Angel Mining Gold A/S, purchased the Project from Crew Gold in 2009 and operated, through their wholly owned UK subsidiary, Arctic Mining Ltd, until previous closure of the mine in 2013.

4.1.3 Current Ownership

The management of Angel Mining (Gold) A/S (“Angel Mining”) was taken up by FBC Mining (Holdings) Limited (“FBC”) after Angel Mining PLC went into administration, although the exploitation licence remained in force. A decision in early 2015 by FBC and its wholly owned subsidiary, FBC Nalunaq, to seek corporate partners on the Project resulted in Arctic Resources Capital S.a.r.l. (“ARC”) becoming the managers of the Project following a meeting in June 2015 where approval was given to the Joint Venture by the Greenland Government. A Collaboration Agreement between the parties was signed on 17 July 2015, giving ARC 66.66% and FBC Nalunaq 33.33% ownership in the Project through a newly incorporated Greenlandic joint venture company, Nalunaq A/S. A Sale and Purchase Agreement was signed between Angel Mining and Nalunaq A/S on 15 October 2015 for the Nalunaq exploitation licence and all associated assets, and the Greenland Government formally transferred the licence to Nalunaq A/S in March 2016.

Prior to Amaroq’s initial public offering (IPO) on the TSX-V, Nalunaq A/S and the Company underwent a corporate reorganisation, which resulted in Amaroq acquiring the entire issued share capital of Nalunaq A/S from ARC, certain of ARC’s shareholders and AEX Gold Limited (formerly FBC Mining (Nalunaq) and now renamed Amaroq), with these parties being issued shares in the Company in exchange. Upon listing, Nalunaq A/S became a 100% wholly owned subsidiary of Amaroq.

4.1.4 Mineral Tenure System

4.1.4.1 Legal Foundation

The Greenland Parliament Act No. 7 of 7 December 2009 on Mineral Resources and Mineral Resource Activities (the “Mineral Resources Act”, or the “Act”) came into force on 1 January 2010 and was amended in 2012 and 2014. This Act established the foundational framework for the administration of mineral resource activities in Greenland.

In 2024, a new legal framework replaced the 2009 Act, marking a significant shift in the governance of mineral resources in Greenland. The new 2024 Mineral Resources Framework introduces a more modernised and strategic approach, aligning mineral policy more closely with Greenland's broader environmental, social, and economic goals. It strengthens provisions for transparency, environmental protection, community engagement, and the inclusion of Greenlandic interests in all phases of resource development.

While the 2009 Act provided the Greenland Government with the authority to issue executive orders and licence terms, the 2024 framework enhances this by embedding sustainability, decarbonisation, and international ESG standards at its core. The updated legislation ensures that mineral resource activities are carried out with increased accountability and benefit-sharing, reinforcing safety, health, environmental integrity, and social responsibility according to best international practices.

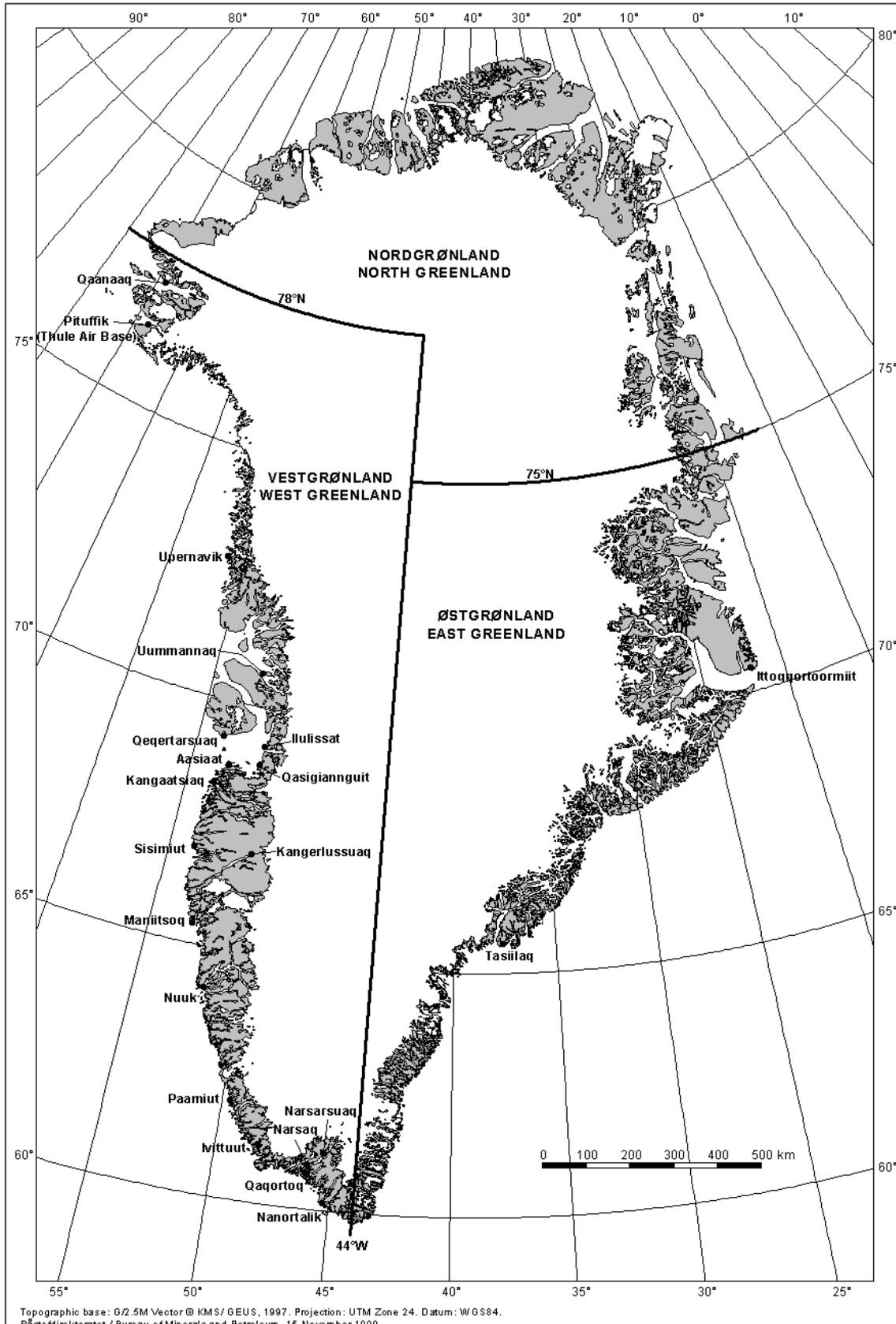
4.1.5 Types of Mineral Licences

4.1.5.1 Prospecting Licences

Prospecting licences are intended for early-stage mineral prospecting activities (excluding drilling) and are typically granted for periods of up to five years. These licences do not confer exclusive rights to exploration or exploitation. Other parties may be granted a similar or different type of licence covering the same area. The 2024 framework continues to treat prospecting licences as non-exclusive and low-impact instruments, primarily used for initial fieldwork, sampling, and mapping.

Prospecting licences cover standard areas in west Greenland (areas west of 44°W and south of 78°N), east Greenland (areas east of 44°W and south of 75°N), and north Greenland (all other areas) (see Figure 4-4). Nalunaq A/S has prospecting licences for west and east Greenland.

Figure 4-4 Prospecting licences in Greenland – Nalunaq A/S holds licences for east Greenland and west Greenland



Source: Amaroq

4.1.5.2 Exploration Licences

Exploration licences grant the licensee exclusive rights to conduct mineral exploration for all mineral commodities (excluding hydrocarbons) within the defined licence area. These areas must still have a minimum size of 5 km² and may include up to five non-contiguous sub-areas with a maximum distance of 100 km between them, as under the previous regime.

Under the 2024 framework, exploration licences are granted for an initial five-year term, with the right to apply for a second five-year term. Following that, extensions of two years may be granted – up to a total maximum duration of 16 years – subject to compliance with licence conditions and work obligations.

The revised act maintains the requirement for annual fixed fees per square kilometre, which increase over time, and a mandatory minimum exploration expenditure that also escalates with the age of the licence. However, the 2024 Act introduces greater administrative efficiency in the renewal process and allows more flexibility in tailoring work programs, especially for strategic or critical minerals.

4.1.5.3 Exploitation Licences

Under the new framework, an exploitation licence may be granted to a licensee who has identified a commercially viable deposit and completed a Bankable Feasibility Study. While an approved Bankable Feasibility Study remains a prerequisite, the 2024 Act allows the licence to be granted prior to final approval of Environmental and Social Impact Assessments (EIA/SIA), enabling parts of the permitting process to run concurrently and shortening the path to production.

The licence confers exclusive rights to both exploitation and further exploration within the licence area and is issued for a period of up to 30 years, extendable to a maximum of 50 years. Exploitation licences must now be held by a Greenlandic limited company with local management, reinforcing national participation and accountability.

The closure plan, developed in coordination with the Government at the time of application, remains a condition of licence termination. The Government still retains the authority to approve temporary suspension of exploitation for up to two years at a time, and after six consecutive years of inactivity, may require implementation of the closure plan.

The Nalunaq exploitation licence is valid until 24 April 2033, after which an extension would be applied for. Amaroq does not envisage any issues relating to this extension. All other required permits for the operation have been fulfilled and are in good working order. Amaroq does not perceive any licensing or permitting issues associated with the Nalunaq operation.

Bara understands there is no known impediment to licence claims and renewal and does not foresee any associated risks in this regard. Bara also understands the activities carried out and planned by Amaroq are in alignment with the permits and licences granted by the appropriate governing body.

4.1.6 Administrative Authorities

The administrative authorities within the Government of Greenland that have responsibility for all matters relating to mineral resources are the:

- Mineral Licence and Safety Authority (“MLSA”)
- Ministry of Mineral Resources (“MMR”)
- Ministry of Industry, Labour and Trade (“MILT”)
- Environmental Agency for Mineral Resource Activities (“EAMRA”).

4.1.6.1 Mineral Licence and Safety Authority

The MLSA is responsible for issuing mineral licences and for safety matters, including supervision and inspections. Licensees and other parties covered by the Mineral Resources Act communicate with the MLSA and receive all notifications, documents and decisions from the MLSA.

4.1.6.2 Ministry of Mineral Resources

The MMR is responsible for strategy making, policy making, legal issues and marketing of mineral resources in Greenland. The MMR deals with geological issues through the Department of Geology.

4.1.6.3 Ministry of Industry, Labour and Trade

The MILT is the authority for issues concerning industry and labour policy including SIAs and Impact Benefit Agreements (IBAs) for mineral resources and similar related socio-economic issues.

4.1.6.4 Environmental Agency for Mineral Resource Activities

EAMRA is the administrative authority for environmental matters relating to mineral resource activities, including protection of the environment and nature, environmental liability and EIAs.

4.2 Royalties

The mineral royalties are set by the Government of Greenland. The following rates, set out in Addendum No. 3 dated 1 July 2014 of the Standard terms for Exploration Licences for Minerals in Greenland, remain in effect (ref. govmin.gl). These royalties relevant to the Nalunaq Project are summarised in Table 4-2.

Table 4-2 Mineral royalties in Greenland

Mineral	Type	Amount
Minerals, other than REE, uranium and gemstones	Sales royalty	2.50%
REE (*c)	Sales royalty	5.00%
Uranium (*d)	Sales royalty	5.00%
Gemstones	Sales royalty	5.50%
	Surplus royalty – when a profit margin exceeds 40%	15.00%

*c Corporate tax and corporate dividend tax may be offset against sales royalty.

*d Corporate tax and corporate dividend tax may not be offset against sales royalty.

*e Corporate tax and corporate dividend tax may not be offset against sales royalty or surplus royalty.

Note: There is currently a moratorium on uranium exploration and mining in force across Greenland.

Source: Government of Greenland [govmin.gl], 2025

4.3 Environmental Studies and Permits

All mineral exploration work programs must be submitted to and receive approval from the EAMRA before commencement. The EAMRA is responsible for ensuring that all mineral resource activities comply with Greenland’s environmental legislation, focusing on safety, health, environmental protection, resource exploitation, and social sustainability.

Exploration activities are required to comply with the “Rules for Fieldwork and Reporting Regarding Mineral Resources”. While these rules were originally published in 2000, they have undergone reviews and updates to align with contemporary environmental standards and practices. Notably, Greenland’s Mineral Strategy 2020–2024 included plans for a comprehensive review of these field rules to enhance their relevance and user-friendliness.

Following the previous closure of the mine in 2014, annual environmental monitoring was carried out by EAMRA through its advisor the Danish Centre for Environment and Energy (“DCE”). It is understood

the costs for this monitoring were taken from the closure bond that became available when Angel Mining closed the mine and the surplus left at the end of the monitoring period in 2019 was returned to Nalunaq A/S.

DCE reported the conclusions in their report: Bach, L, 2020, Environmental monitoring at the Nalunaq Gold Mine, South Greenland, 2004-2020, Aarus University, DCE-Danish Centre for Environmental and Energy, 76pp, Scientific Report No. 386.

DCE in their conclusion, reported:

“Overall, DCE assesses the current environmental impact from the former mining activities to the environment at Nalunaq as insignificant and that no further actions are needed to reduce the environmental impact.”

Consequently, DCE considered the Nalunaq Gold Project could serve as an example of how adequate environmental requirements together with detailed environmental monitoring and regulation can result in a mine operation in Greenland with minimum environmental impact.

Currently, the Project is in “Commissioning Phase”, transitioning from a “Bulk Sample” phase. Commissioning started in December 2024. During the “Commissioning Phase”, temporary operating approvals are in place pending approval of the final Mine Plan. A Commissioning Phase Environmental Monitoring Plan is in place at this time. The final Production Phase “Environmental Monitoring Plan” will be agreed in due course prior to completion of commissioning.

Amaroq completed a full EIA in 2024 with consultancy, WSP.

Bara is not aware of any environmental liabilities that Nalunaq A/S is subjected to that act as an impediment to the publication of this MRE.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access

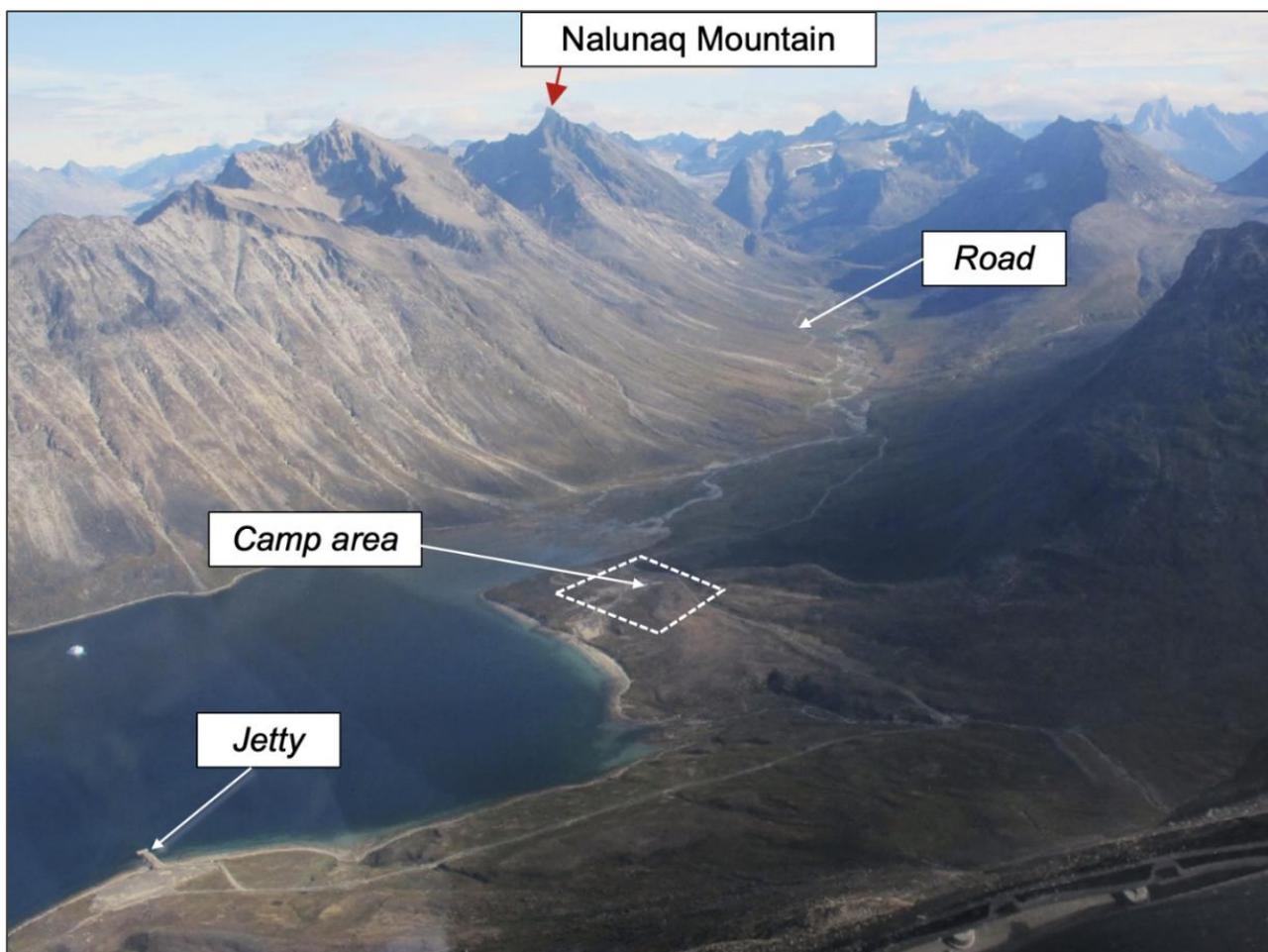
Narsarsuaq Airport (113 km or 70 miles north-northwest of Nalunaq) is presently the international access point for south Greenland. International flights from Iceland and Denmark are available, while domestic routes include the capital, Nuuk, and Kangerlussuaq.

Most areas in south Greenland can then be accessed either by boat or helicopter (either scheduled or chartered) from Narsarsuaq or Qaqortoq, a nearby larger town en route to site.

Typically, travel from Narsarsuaq to Nalunaq would be either directly by boat (4 hours), or by taking a helicopter to Nanortalik (1 hour and 10 minutes) and an onward boat (20 minutes). Direct travel to site is also possible by helicopter.

From the Nalunaq jetty, the mine can be reached by 4x4 vehicle along the 9 km long former mine road which is unsealed, but in reasonable condition. 4x4 vehicles can be mobilised to the area by landing craft. In Figure 5-1, the mine jetty can be seen in the lower left and the mine access road can be seen parallel to the river.

Figure 5-1 Aerial view north-eastwards up the Kirkespirdalen Valley, with Nalunaq Mountain arrowed



Source: Amaroq

Note: The jetty can be seen at bottom left and the mine access road can be seen paralleling the river source.

5.2 Physiography

The mine site is located 6 km inland along the Kirkspirdalen Valley from an embayment on the eastern side of Saqqaa Fjord.

The topography in the area is rugged to alpine. Steep mountains can reach elevations of 1,500 m above sea level. Many of them are glaciated and the southern tip of the permanent ice sheet is about 33 km to the northeast of the mine. Valley floors and lower mountain sides are covered by typical sub-Arctic vegetation.

In Figure 5-2, Nalunaq Mountain can be seen on the left, slightly obscured by cloud, situated approximately 7 km from the photographer's location.

Figure 5-2 View of Nalunaq Mountain towards the northeast from close to the harbour



Source: Amaroq

5.3 Climate

The climate of south Greenland is relatively mild for the latitude. In Nanortalik, the closest town to Nalunaq, average temperatures range from around -5°C in January to approximately 7°C in August. Temperatures below 0°C typically occur between November and March. Rainfall is moderate and generally consistent throughout the year, averaging around 8–10 mm per month, although periods of heavier precipitation can occur. Snow cover is likely from October to April, with the possibility of deep accumulations during the winter months. Annual variations may affect the exact timing and intensity of snow and rainfall.

The climate is favourable for year-round operations at the mine and processing facility, while surface exploration activities (i.e. drilling, surface mapping and field sampling) are most practicable from early summer into the autumn (i.e. April to October).

Saqqaa Fjord does not generally freeze over during the winter; navigation by boat to the former mine jetty is possible for most of the year. When necessary, pack-ice can be managed using icebreakers and by transporting both materials and personnel by helicopter when necessary.

The Nalunaq accommodation camp is capable for exploration operation during the winter, though requires winterisation measures during particularly heavy winters.

5.4 Local Resources and Infrastructure

5.4.1 Local Amenities

Qaqortoq is the largest town in south Greenland with a population of c. 3,100. The town is located 77 km northwest of Nalunaq. The closest population centre to Nalunaq is Nanortalik, which is 33 km to the southwest. Nanortalik has a population of approximately 1,100 and is Greenland's most southerly town. It is readily accessible by boat or helicopter and has a port capable of handling cargo vessels. Most people in the town are engaged in fishing, public services, construction and tourism.

There are many people still in Nanortalik who worked in the mine when it was operational previously, and the town remains a good source of local workers.

5.4.2 Infrastructure

The project infrastructure at Nalunaq (Figure 5-3 and Figure 5-4) has been rapidly evolving through 2024 and 2025 to accommodate the start of trial mining, with the first ore blast completed on 30 June 2024 (Amaroq Q2 2024 Financial results, 14 August 2024). Some of this is temporary in nature. Infrastructure will continue to be expanded to accommodate the needs of the operation. Much of the information provided in this section has been sourced from the Company's official documentation to the Greenlandic Government, Section 77 (Amaroq, 2025).

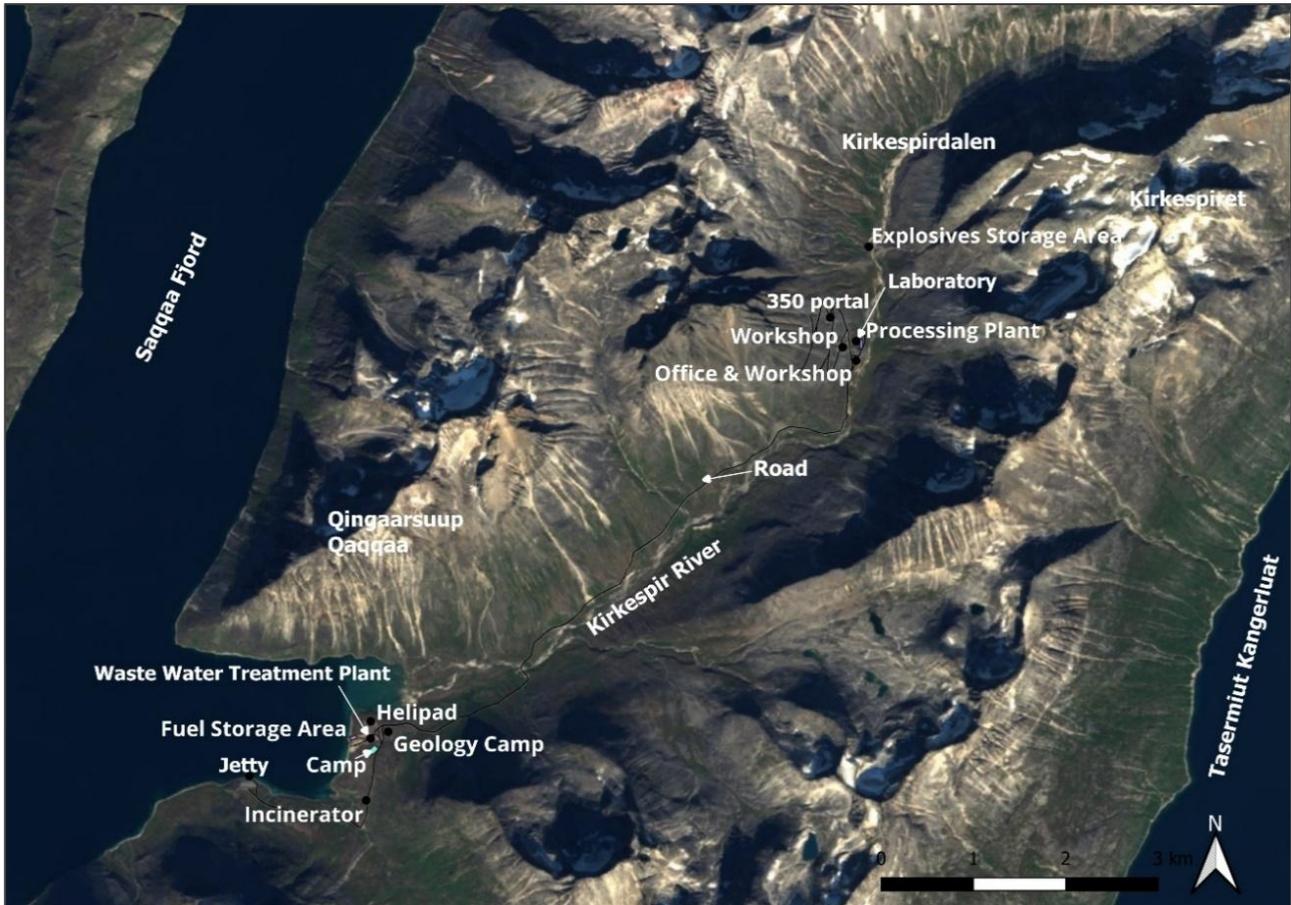
Maps of surface infrastructure may be found below in Figure 5-3 and Figure 5-4.

The Nalunaq Project infrastructure currently consists of the following:

- Located at mine area – Nalunaq Mountain:
 - Underground mine
 - Process facility, mobile equipment, and maintenance shops
 - Office/Administration complex
 - Critical spares stores
 - Waste rock management areas
 - Electrical power generation, of substation and distribution
 - Fuel storage.
- Located at beach/mouth of Kirkespir River/Sarqå Fjord:
 - Beach landing area
 - Port jetty
 - 100+ person accommodation camp
 - Wastewater treatment plant
 - Fuel storage (main camp and mine site)
 - Incinerator
 - Material storage areas.

The Project benefits from an existing 9 km gravel road running from the jetty past the accommodation camp up to the mine area (Figure 5-3 and Figure 5-4) and the processing facility (Figure 5-5). The road was repaired in 2019, and maintenance work is ongoing. The Kirkespir River Crossing bridge has been expanded to provide more flow capacity under the 1:1,000 years' flooding events.

Figure 5-3 Surface infrastructure between the camp (southeast) and Kirkespirdalen Valley (northeast)



Source: Amaroq

5.4.2.1 Accommodation Camp

The accommodation camp (Figure 5-4), located proximal to the mine on Saqqaa Fjord, consists of dormitory modules, a kitchen and a dining room, a laundry unit, a change room, as well as a recreation building including a gymnasium and an administration office. It is capable of hosting 120 people. Water is trucked in on a daily basis from the nearby river for the camp water tanks. Effluent is removed from the camp to a wastewater treatment plant (under commissioning) before being discharged into the fjord. Effluent is removed from the camp to a wastewater treatment plant (under commissioning) before being discharged into the fjord.

Figure 5-4 Aerial picture of the Nalunaq accommodation camp (accommodation block labelled alphabetically)



Source: Amaroq

5.4.2.2 Power Supply

Two 250 kW Kohler generators are used at the Nalunaq camp. There are three 785 kW Caterpillar generators in use at the processing plant, with a planned fourth yet to be installed. The workshop and Thyssen offices use one 250 kW Kohler generator, and one additional 250 kW generator is used to power the mine.

5.4.2.3 Processing Facility

Amaroq is in the process of constructing a new processing facility at Nalunaq. Ore is planned to be fed to the processing facility at a base rate of 104,025 tonnes per year at a nominal feed rate of 300 tonnes per day for 365 days in the year based on an assumed availability of 95%. The processing facility consists of the following extraction circuits: crushing, grinding, gravity recovery, flotation, thickening, tailings filtering, and a gravity concentrate smelting facility.

The processing facility is designed with the potential to be upgraded to 150,000 tonnes per year with the addition of a second ball mill and upgraded flotation circuit.

Figure 5-5 Image of the processing facility looking to the west, with Nalunaq Mountain in the background



Source: Amaroq

5.4.2.4 Underground Workings

The main ramp allows access to all parts of the mine (except currently the flooded South Block). It has been developed in the footwall and comprises a series of spirals and inclines with short crosscuts leading to ore drives.

The ramp connects to the surface via the 300, 350, 400, 450, 500 and 600 Level portals (Figure 5-6 and Figure 5-7), although access is currently predominantly via the 300 Level portal with access via others dependent on snow cover. Ground stability conditions are good throughout. The ramp has been rehabilitated through to the current mining areas on the 720–750 Levels.

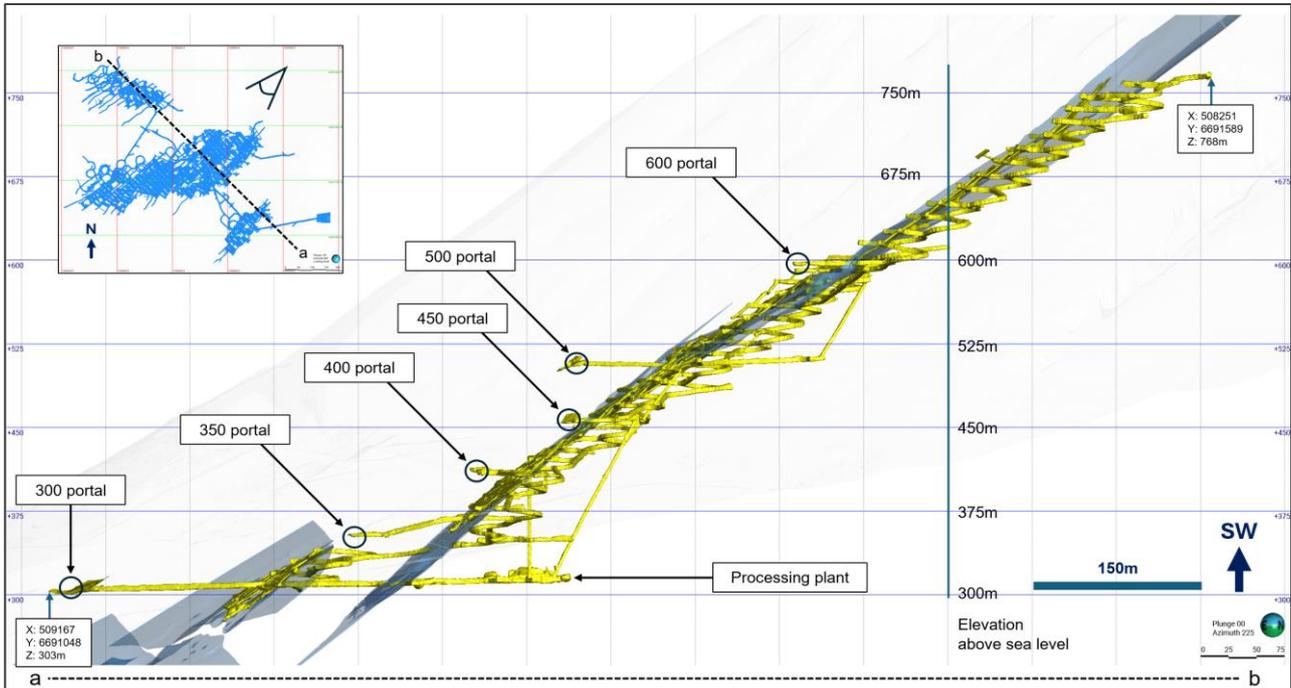
Two refuge stations currently exist underground. One is located on 700 Level in the Mountain Block and another on 540 Level in the Target Block. These provide safe shelter in case of a mine fire.

Additional portals include:

- 350 Portal: Escape way.
- 400 Portal: Currently blocked by muck for ventilation purposes.
- 450 Portal: Escape way and secondary mine entrance during summer. This is the highest portal that can be accessed by vehicle from the surface road.
- 600 Portal: Used for waste rock dumping and serves as an escape to fresh air.
- 742 Portal: Newly established (December 2024), acts as the main exhaust portal and fan location, also provides escape to fresh air.
- 773 Portal: Planned intake portal for future development in upper levels.

All portals above Level 450 serve as escapes to fresh air only and are not connected to any surface road.

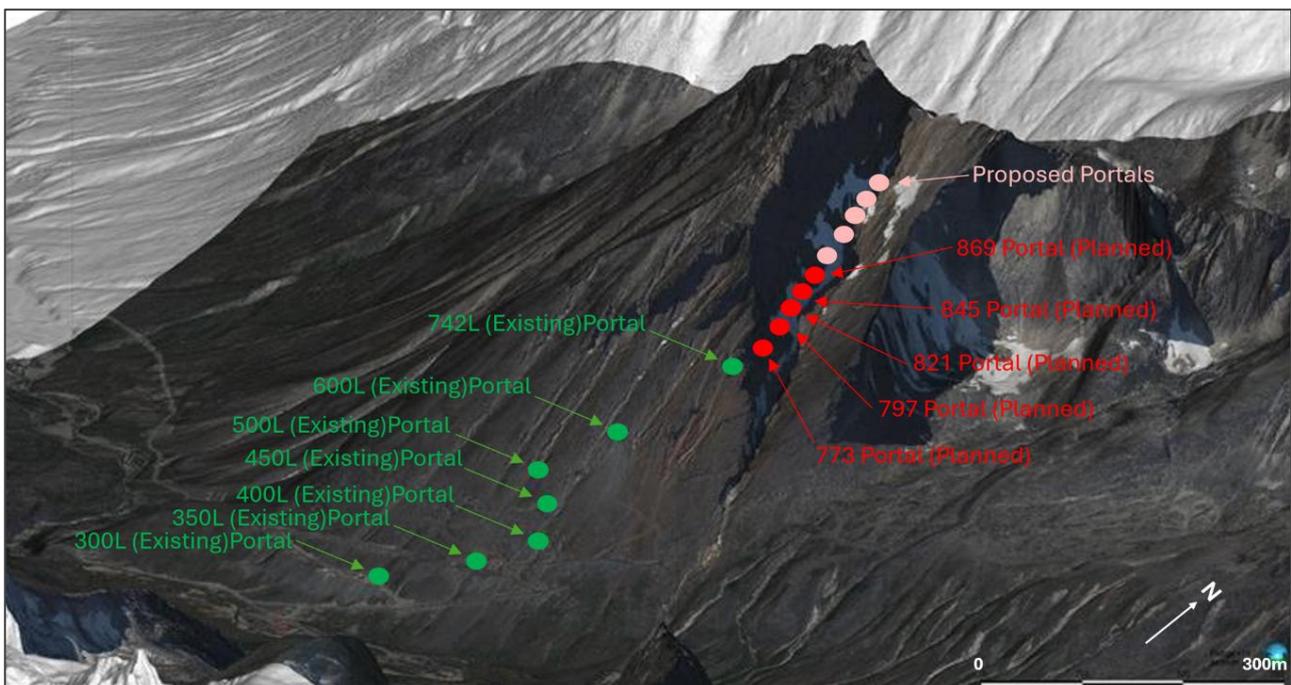
Figure 5-6 Map of underground workings (in yellow) looking toward the southwest, including portals



Source: Amaroq

Note: The modelled orientation of Main Vein is also shown as a reference. The inset map shows the underground workings in plan view (in blue) along with the viewer's orientation for the main map. Coordinates are in WGS84 Zone 23N and are in metres.

Figure 5-7 Egress points at Nalunaq Mine



Source: Amaroq

A ventilation system is in place and operational.

The main airway runs from the 300 Portal (intake) to the 742 Portal (exhaust), powered by two AL12 55 kW Korfmann fans. Auxiliary ventilation supplies fresh air to the sublevels via AVH63 30kW Epiroc fans and ESN9 37 kW Korfmann fans. Both types work with 800 mm diameter ventilation ducts to deliver

fresh air directly to the working headings. The current setup is constrained by the historical ramp profiles. However, with the commissioning of the 742 Portal, more flexibility in the auxiliary ventilation setup has been achieved. Each fan can now be dedicated to one sublevel, reducing reliance on natural airflow.

Pipes for water and compressed air from the historical mine were stripped during the initial project phase due to leaks, rust, and poor suspension. However, these pipes are stored and occasionally reused for local water control. Several water lines remain installed in service raises; once tested, these may be usable to shorten the length of new lines.

Water is collected in multiple underground reservoirs:

- 300 Level old main pump sump
- 420 and 490 Level water dams
- 720 Sump (mined during recent development).

Water draining through the mine is collected in these locations and distributed using a 4,000-litre water truck. A more permanent water supply system is under development and will connect the reservoirs in cascade using pumps, PE pipes, and potentially some of the existing service raise infrastructure.

Tailings (processed ore) from the Phase 1 (gravity circuit) facility are currently stored in the underground mine (L300) ahead of haulage back to the facility once Phase 2 (flotation) is commissioned. From here onwards, tailings are scheduled to be dry stacked underground.

Underground communication is maintained via a leaky feeder radio system. One of the channels is directly linked to Emergency Channel #1 on surface, ensuring that mine fire response or evacuation procedures can be triggered from underground.

6 HISTORY

6.1 Introduction

Gold was first reported in the Nalunaq area in 1986 when it was discovered in alluvial settings in the Kirkspirdalen Valley. An exploration licence was granted to NunaOil A/S in 1990, eventually leading to the discovery of the Main Vein at Nalunaq in 1992. Further exploration and drilling confirmed the presence of a continuous mineralised structure hosting high grade, sometimes bonanza grade, gold. Visible gold is common (e.g. up to 5,240 g/t Au over 0.8 m in an exploration channel sample).

An exploitation licence (MIN 2003-05) was granted to Crew Gold in 2003, who undertook mining from 2004 until 2009 with processing carried out offsite; in Spain and later Newfoundland. The Project was then acquired by Angel Mining PLC who operated until closure in 2013, processing material at an underground cyanide plant on site. In total, around 367,130 ounces of gold was produced, 352,307 ounces of gold being from Crew Gold's operation. During 2014, the ownership of the exploitation licence was formally transferred from Angel Mining PLC to FBC Mining Limited although it remained in the name of Angel Mining. FBC Mining entered a joint venture agreement with ARC, which was approved by the Government of Greenland and signed on 17 July 2015, and the licence is now held in the name of the Greenlandic joint venture company, Nalunaq A/S as a wholly owned subsidiary of Amaroq.

6.2 Historical Exploration

6.2.1 Early Mapping and Stream Sediment Sampling

Systematic geological mapping has been carried out in south Greenland since around 1954 by the Geological Survey of Greenland (GEUS, formerly GGU). Maps at 1:100,000 scale were published in 1975. Regional uranium exploration was carried out from 1975 to 1979, including airborne gamma ray spectrometry surveys with subsequent ground studies of anomalies. Approximately 2,300 stream sediment samples were collected in south Greenland between 1979 and 1986 as part of the Sydurán program (Armour-Brown et al., 1980). Gold was first reported in the Nalunaq area by geological consultant Carl Nielsen A/S in 1986 while assessing the area's mineral potential on behalf of Nanortalik kommune. This led to the formation of a new company Nanortalik Minerals A/S in 1998 to explore for alluvial gold in Kirkespirdalen. This discovery led NunaMinerals to analyse the remaining fine fraction of the regional stream sediment samples for gold plus 33 trace elements in 1989 (Steenfelt, 1990), where it was found that anomalous gold values (25–850 ppb Au) are distributed over much of South Greenland.

6.2.2 Main Vein Outcrop Sampling (1993 to 1999)

Outcrops of the Main Vein structure were located in September 1992 (Gowen et al., 1993) after follow-up work consisting of a short period of geological mapping and stream sediment sampling earlier in the summer. There have been several outcrop sampling programs undertaken subsequently. In 1992, the first set of surface samples were collected from the lowermost outcrop at what is now the 400 Level adit entrance to a large quartz outcrop at 850 masl on the east face of Nalunaq Mountain. A total of 23 channel samples were collected at 20 m intervals using a diamond saw and 15 chip samples were also taken. The weighted average of all samples along this 800 m exposure was 51.5 g/t Au over a width of 0.4 m. High-grade values up to 405 g/t over 0.3 m and 235 g/t over 1.0 m were encountered at the lowermost and the highest locations sampled, respectively, i.e. 800 m apart. Details of the sampling program are found in Gowen et al. (1993).

In 1993, outcrops of the Main Vein were sampled on the north face of Nalunaq Mountain. Samples were chipped and collected at 40–80 m intervals along the more than 1,000 m length of the near-vertical

north face by a group of mountaineers. The results of this sampling are found in Petersen (1993). The average of this sampling campaign was 41 g/t, including 186 g/t and 246 g/t over 0.3 m, and average of the quartz vein which was 0.32 m. The high-grade samples were consistently located along the lowermost third of the north face. Higher-grade samples were encountered again towards the summit, including 13 g/t over 0.5 m and 54 g/t over 0.4 m. Geological mapping across much of the Kirkespir Valley was also carried out in 1993 at a scale of 1:10,000 (Petersen, 1993).

In 1999, a detailed, systematic surface sampling was conducted on the east face after the major part of the Main Vein had been exposed by hand digging along its full length on the east face. More than 600 m of the approximately 800 m length was exposed. The missing portions were covered by thick talus, which could not be removed by hand. Several pits along the covered portion supported the continuation of the vein below the talus.

The exposed vein was sampled with a diamond saw at 1 m intervals and the sampling included hangingwall and footwall sampling at every 10 m (Figure 6-1). The details, including geological maps and photographs of the sampled vein segment, are found in Heilmann (2000). The surface sampling at 1 m intervals was of a similar tenor to the underground channel sampling described in Section 6.2 and results showed significant variation in grade, with distinct zones of higher grade.

Figure 6-1 Chipping of the surface channel samples at 1 m intervals, after cutting with a diamond blade saw



Source: Kvaerner, 2002

Sporadic grab sampling of other quartz veins throughout the Nalunaq Mountain has returned a few elevated gold values, most of which are associated with a minor quartz vein which splits off from the Main Vein and continues with approximately 40 m structurally above the Main Vein level. This vein was designated the Hangingwall Vein (HWV) and is also located in several drill profiles. The presence of other gold-bearing quartz veins is indicated by float sampling on Nalunaq's eastern face with up to 41 g/t (Kvaerner, 2002), although the source of the float material was not located.

6.3 Exploration History

Regional geological mapping in the area had been carried out in the 1960s by the Geological Survey of Greenland ("GGU", later "GEUS") and provided a foundation for mineral exploration. Prior to the discovery of Nalunaq, exploration work was largely targeted for uranium but also included regional stream sediment sampling campaigns and airborne geophysics.

Gold was first reported in the Nalunaq area by geological consultant Carl Nielsen A/S in 1986 while assessing the area's mineral potential on behalf of Nanortalik kommune. This led to the formation of a new company Nanortalik Minerals A/S in 1998 to explore for alluvial gold in Kirkespirdalen. A joint venture was established with Greenex A/S (former owner of the Black Angel lead-zinc mine in west Greenland). Work in 1998 included trenching at Kirkespirdalen delta and mapping and geochemical sampling in the valley. Results of trenching were too low grade to be of further interest and Greenex subsequently withdrew from the joint venture.

Nanortalik Minerals continued mapping and sampling in 1989, collecting stream sediment and heavy mineral concentrates within Kirkespirdalen Valley. High-grade gold anomalies (up to 95 ppm in rock samples) were collected in screes at Nalunaq and visible gold was panned in the streams. Further geological mapping and sampling was undertaken in 1991 but failed to locate outcropping gold mineralisation and Nanortalik Minerals dropped the concession in late 1991.

During 1990, NunaOil A/S (an exploration company owned 50/50 by the governments of Denmark and Greenland) re-assayed stream sediment samples collected by the GGU in the late 1970s as part of a regional uranium exploration program. Despite the sample sizes being smaller than optimal, several areas on the Nanortalik peninsula returned gold anomalies 5 to 10 times higher than other areas in the region (Gowen et al., 1993).

In December 1991, NunaOil applied for its own concession over the area (licence number 04/97) and carried out a short period of geological mapping, rock sampling and scree heavy mineral concentrate sampling at Nalunaq in July 1992. Follow-up work in September 1992 resulted in the discovery of a 0.5 m to 2.0 m thick outcropping quartz vein at ~400 masl (Figure 6-2) which contained abundant visible gold (Main Vein) and could be traced for 800 m up the eastern flanks of Nalunaq Mountain. Preliminary mapping and close spaced channel sampling were carried out in late September 1992.

Figure 6-2 The “discovery outcrop” of the Main Vein close to the 400 Level Portal



Source: SRK ES, 2016

Exploration intensified after this discovery and in 1993 NunaOil entered a joint venture with Cyprus Greenland Corporation (“Cyprus”), a subsidiary of US-based company Cyprus Amax Minerals Company. They conducted a ~3,000 m drilling program and further geological mapping. Results did not meet Cyprus’ expectations, and they withdrew from the joint venture in late 1993.

Further drilling was carried out by NunaOil in 1995 and in 1998 a joint venture was established between NunaOil and the Norwegian company Mindex ASA, giving Mindex the option to earn 50% of the Project by funding the season’s exploration program. A total of 5,100 m was drilled, and a 280 m adit was constructed on the 400 m level. Two raises were developed from this drive to test grade continuity and variability of the Main Vein.

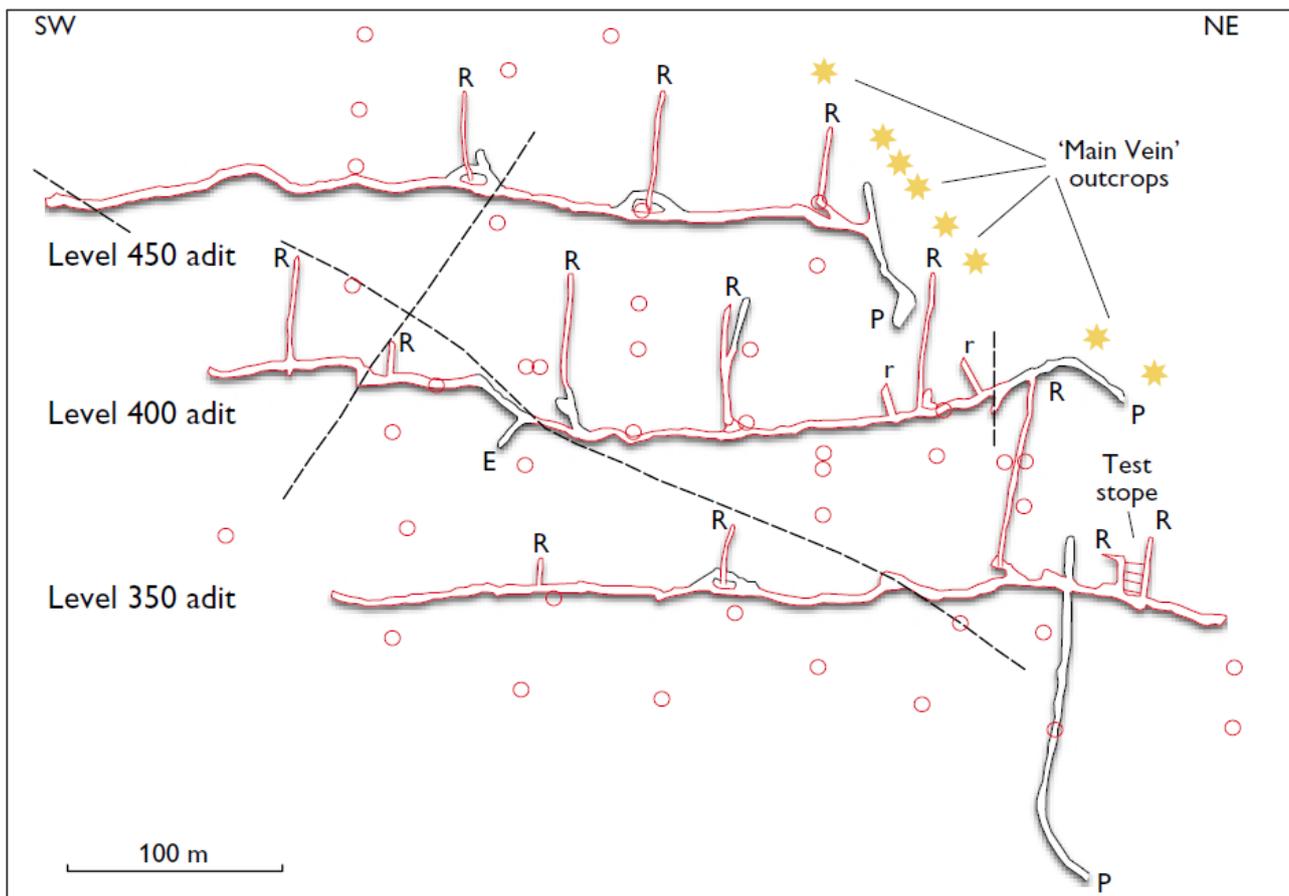
In 1999, the joint venture partners completed a 2,500 m surface drilling program and a major trenching and 1 m spaced channel sampling program on the exposed Main Vein on Nalunaq’s east face between elevations of 468 m and 775 m. This work demonstrated similar vein continuity to the mineralisation underground on 400 Level and encouraged the company to continue underground development in 2000.

Mineral Resource Development International (“MRDI”) produced a pre-feasibility study in 1999 based on the surface and underground exploration data. This was positive and defined an Inferred Resource of 316,856 ounces of gold in material with an average grade of 26.4 g/t Au (MRDI, 1999).

In 2000, 1,902 m of underground development and an extensive bulk sampling program was undertaken by Strathcona Mineral Services (Strathcona, 2001). The Main Vein was developed on two new levels at

elevations of 350 m and 450 m and the 400 m Level was extended, with raises driven approximately every 80 m along strike to provide up-dip information (Figure 6.2). Each blasted round was processed through a sample tower (Lind et al., 2001), reduced to approximately 36 kg and shipped to Lakefield Research in Ontario, Canada for assaying and further testwork. A total of 25,000 tonnes of crushed ore was stockpiled on the valley floor. After completion of the program, NunaMinerals (formerly NunaOil) reduced its interest from 50% to 33%, leaving Crew Development Corporation (formerly Mindex ASA) with 67% of the Nalunaq Project.

Figure 6-3 Longitudinal section drawn in the plane of the Main Vein, dipping at about 36° southeast, showing the first exploration adits and raises



Source: Lind et al., 2001

Note: Black lines indicate development in waste to access the Main Vein, red lines indicate development in ore. Dashed lines show minor dextral faults with metre-scale offsets, and red circles indicate Main Vein intersections from surface drilling.

In 2001, a new agreement changed the ownership so that NunaMinerals retained an 18% carried interest and Crew Gold owned 82% as the operator and responsible partner for completing a bankable feasibility study and project financing. A total of 2,700 m of surface diamond drilling was carried out and 1,700 m of underground development extended the 350 m, 400 m and 450 m levels, as well as an access to a new level at 300 m elevation.

A bankable feasibility study was completed by Kvaerner Engineering and Construction UK Ltd ("Kvaerner") in 2002, and in April 2003 a 30-year exploitation licence (MIN 2003-05) was granted to Crew Gold, who commenced mining at Nalunaq in 2004 and owned and operated the mine until July 2009. Crew Gold carried out further exploration during this period, with 16,258 m of surface diamond drilling completed between 2004 and 2006 and 5,572 m of underground diamond drilling between 2004 and 2008.

6.4 Previous Mineral Resource Estimates

The following subsections set out historical Mineral Resource estimates for the Nalunaq Gold Project. Amaroq are not treating these historical estimates as current Mineral Resources since they have been superseded by the current MRE as set out in Section 14.

6.4.1 Historical Mineral Resource Estimates

6.4.1.1 MRDI, 1999

MRDI completed a pre-feasibility study of the Nalunaq Gold Project in south Greenland in March 1999, having been engaged by Nalunaq IS, a Greenlandic joint venture between Mindex ASA and NunaMinerals A/S.

MRDI outlined an Inferred Resource across the area containing surface channel samples, underground samples and drillhole intersections with grade-thicknesses in excess of 10 gram metres (grade x width). The resource was based on all data gathered to date, including the results of 58 diamond drillholes. The Inferred Resource boundary was extended 50–100 m beyond the drillhole intersections. A corridor approximately 25 m wide on each side of the exploration adits was categorised as Indicated Resources. The Mineral Resource statement is summarised in Table 6-1.

Table 6-1 1999 pre-feasibility study Mineral Resource statement

Resource block	Area (m ²)	Grade thickness (cm.g/t)	Average thickness (cm)	Average grade (g/t)	Tonnage (tonnes)	Contained metal (troy oz)
Indicated	13,650	3,231.0	52.7	61.3	20,861	41,125
Inferred 1	59,500	3,016.4	124.0	24.3	213,962	167,357
Inferred 2	23,230	3,016.4	124.0	24.3	83,535	65,339
Inferred 3	15,300	3,016.4	124.0	24.3	55,019	43,035
Total				26.4	373,377	316,856

Source: MRDI, 1999

The Mineral Resource estimation did not use geostatistical techniques – instead the area of each resource block was calculated in the plane of the vein, then for each block the average thickness and average grade thickness were calculated and used to calculate the contained metal after determining tonnages using a specific gravity of 2.9.

6.4.1.2 SRK, 2002

An independent MRE was produced by SRK Consulting (Toronto) in 2002 using geostatistical kriging methods in Gemcom software (SRK, 2002), in accordance with CIM and NI 43-101 guidelines. The database was provided from Nalunaq A/S and included all drillholes and underground sampling to date, as well as surface sampling between 300 masl and 1,250 masl. The resource was constrained only to the developed parts of the Main Vein in Target Block and South Block between 300 masl and 500 masl, however, the potential for additional Resources beyond this area was recognised. Table 6-2 provides a summary of the 2002 MRE.

Table 6-2 Summary of the SRK 2002 MRE, reported at zero-cut off grade

	Over 1.0 m		Over 1.2 m		Over 1.5 m		Ounces gold
	Tonnes	g/t Au	Tonnes	g/t Au	Tonnes	g/t Au	
Measured and Indicated Mineral Resources							
Main Vein (including stockpiles)	352,100	30.3	414,200	25.8	508,300	20.9	343,700
South Vein	58,000	28.3	69,700	23.6	88,300	18.7	52,900
Total	410,100	30.0	483,900	25.5	596,600	20.6	396,600
Inferred Mineral Resources							
Main Vein	200,000	24.7	240,100	20.6	326,000	15.9	159,100
South Vein	34,000	22.4	41,200	18.7	52,000	14.8	24,800
Total	234,000	24.4	281,300	20.3	378,000	15.7	183,900

Source: Kvaerner, 2002

SRK updated this MRE later in 2002 to include data from a further 800 m of underground development, converting some of the Inferred Mineral Resources to Indicated and Measured, and adding ounces to the Target and South blocks. The same estimation methods were used. This updated MRE is summarised in Table 6-3, reported at zero cut-off grade and a 1.5 m minimum stoping width.

Table 6-3 Summary of the updated MRE produced by SRK in 2002, reported at a 1.5m minimum stoping width and zero cut-off grade

Resource category	Tonnage (t)	Grade (g/t gold)	Ounces gold
Main Vein Resource			
Measured	245,000	19	150,000
Indicated	210,000	21	142,000
Inferred	260,000	18	150,000
South Vein Resource			
Measured	56,000	12	21,600
Indicated	120,000	12	46,300
Inferred	95,000	11	33,600

Source: Table from Snowden, 2005

In addition to the MRE summarised above in Table 6-4, SRK defined an Inferred Resource of 167,200 ounces combined for the Upper and Mountain Blocks, up-dip from the Target Block (Table 6-5).

Table 6-4 MRE statement for the Upper and Mountain Blocks, reported at a zero cut-off grade and 1.5 m minimum stoping width

Inferred Mineral Resources	Tonnage (t)	Grade (g/t gold)	Ounces gold
Upper Block	125,000	11.5	46,200
Mountain Block	201,000	18.7	121,000

6.4.1.3 Snowden, 2005

Snowden produced a MRE in 2005 using a two-dimensional (2D) kriged block model in Datamine software, in accordance with the 2004 CIM Code. In a departure from the previous SRK MRE, Snowden did not assign any of the Resource to the Measured category, as they did not believe the required confidence level had been met, even proximal to the underground development. In their opinion, sufficient grade continuity had not been proved by current mining for a Measured Resource. The 2005 MRE included areas surrounding ongoing development in the Target and South blocks (Table 6-5) and

Inferred Mineral Resources for the other blocks which were based only on surface sampling and diamond drilling (Table 6-6).

Table 6-5 Target Block and South Central Block Mineral Resources diluted to 1.4 m and reported at a zero cut-off grade

Block	Inferred Mineral Resources	All tonnes in Resource ⁽¹⁾	Stope tonnes	Pillar tonnes (in-situ)	Pillar tonnes (planned)	Grade (g/t Au)	Ounces gold
Target	Indicated	381,000	329,000	14,000	38,000	21	257,000
	Inferred	270,000	243,000	None	27,000	16	139,000
South Central	Indicated	57,000	51,000	None	6,000	19	35,000
	Inferred	80,000	72,000	None	8,000	17	44,000

Source: Snowden, 2005a

Table 6-6 Inferred Mineral Resources for the South, Target North, Upper and Mountain blocks

Block	Tonnage ⁽¹⁾	Grade ⁽²⁾ (g/t Au)	Ounces gold
South	520,000	18 (16-21)	301,000
Target North	290,000	18 (16-21)	168,000
Upper	320,000	18 (16-21)	185,000
Mountain	190,000	18 (16-21)	110,000
Global	1,320,000	18 (16-21)	765,000

⁽¹⁾ Payable tonnage after factoring in a 45% payability factor. ⁽²⁾ Best estimate grade within a grade range.

Source: Snowden, 2005a

Inferred Resources for the Mountain, Upper, Target North and South blocks were not estimated using a kriged block model but instead by using a global “best estimate” grade of 18 g/t Au based on an expected grade range of 16–21 g/t and assigning a “payability factor” of 45% to the tonnage estimates to provide a payable tonnes estimate. The 45% was based on the relative proportion of high-grade mineralised zones that were believed to pass through each block.

6.4.1.4 Angel Mining, 2013

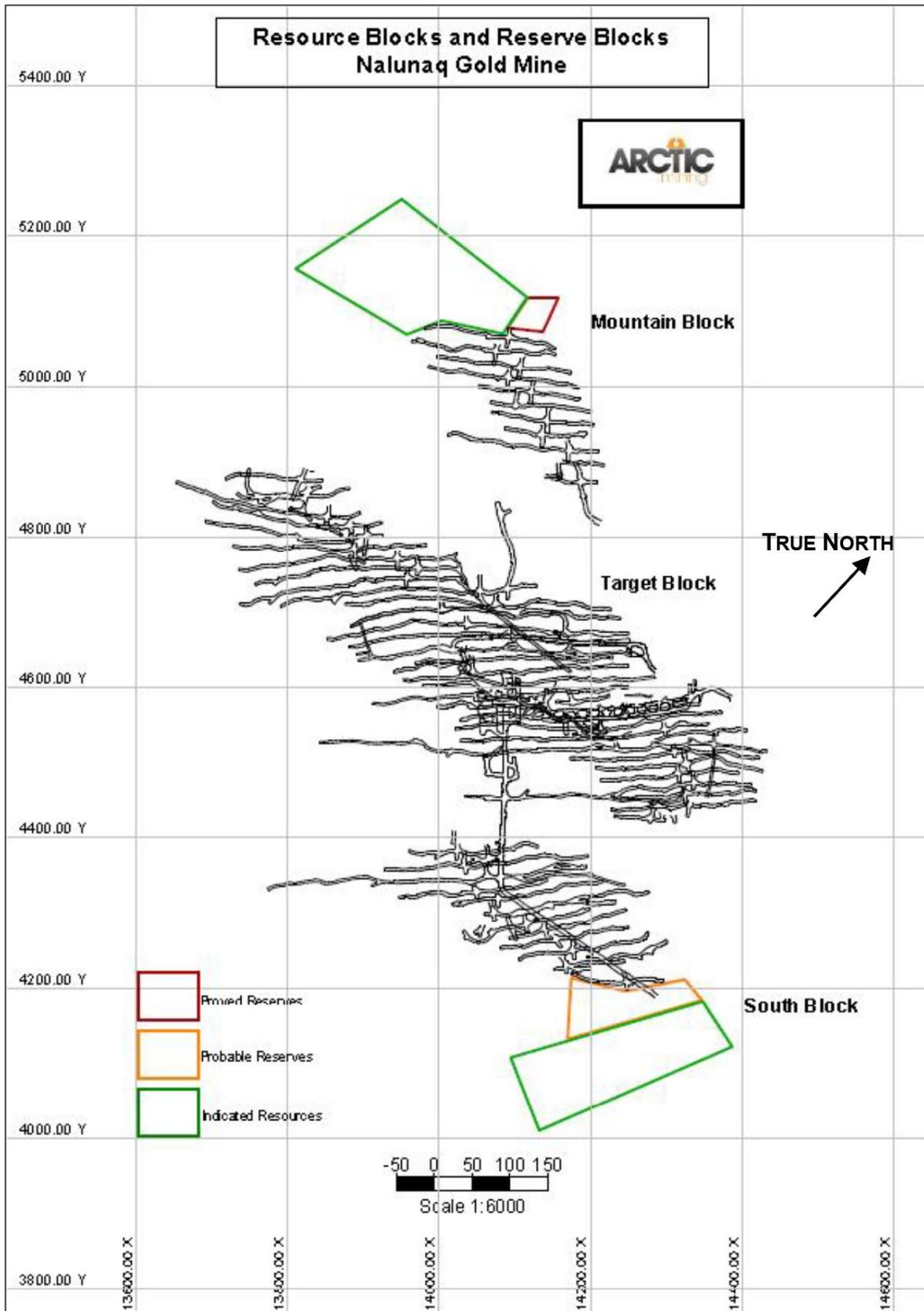
Angel Mining produced an internal closure mineral resource and reserve statement at the end of 2013, after the decision to suspend mining activities had been taken (Graham, 2014). This is summarised in Table 6-7, with resource area shown in Figure 6-4 and Figure 6-5, although is not considered to be compliant to international reporting codes. The MRE does not include statistical analysis, instead involving simple polygonal methods and dilution to a 1.5 m stoping thickness. Closure reserves were reported in areas which had been opened up by underground development.

Table 6-7 Resource and reserve statement compiled in December 2013

	Tonnes	Grade (g/t Au)	Contained gold (oz)
Nalunaq resources, 31 December 2013			
Total Inferred	250,000	15.2	120,000
Total Indicated and Measured	45,000	13.8	19,000
Resources in Pillars	11,000	19.0	6,700
Nalunaq ore reserves, 31 December 2013			
Total reserves (all blocks and stopes)	25,500	19.8	16,000
Total reserves	28,000	18.7	16,800

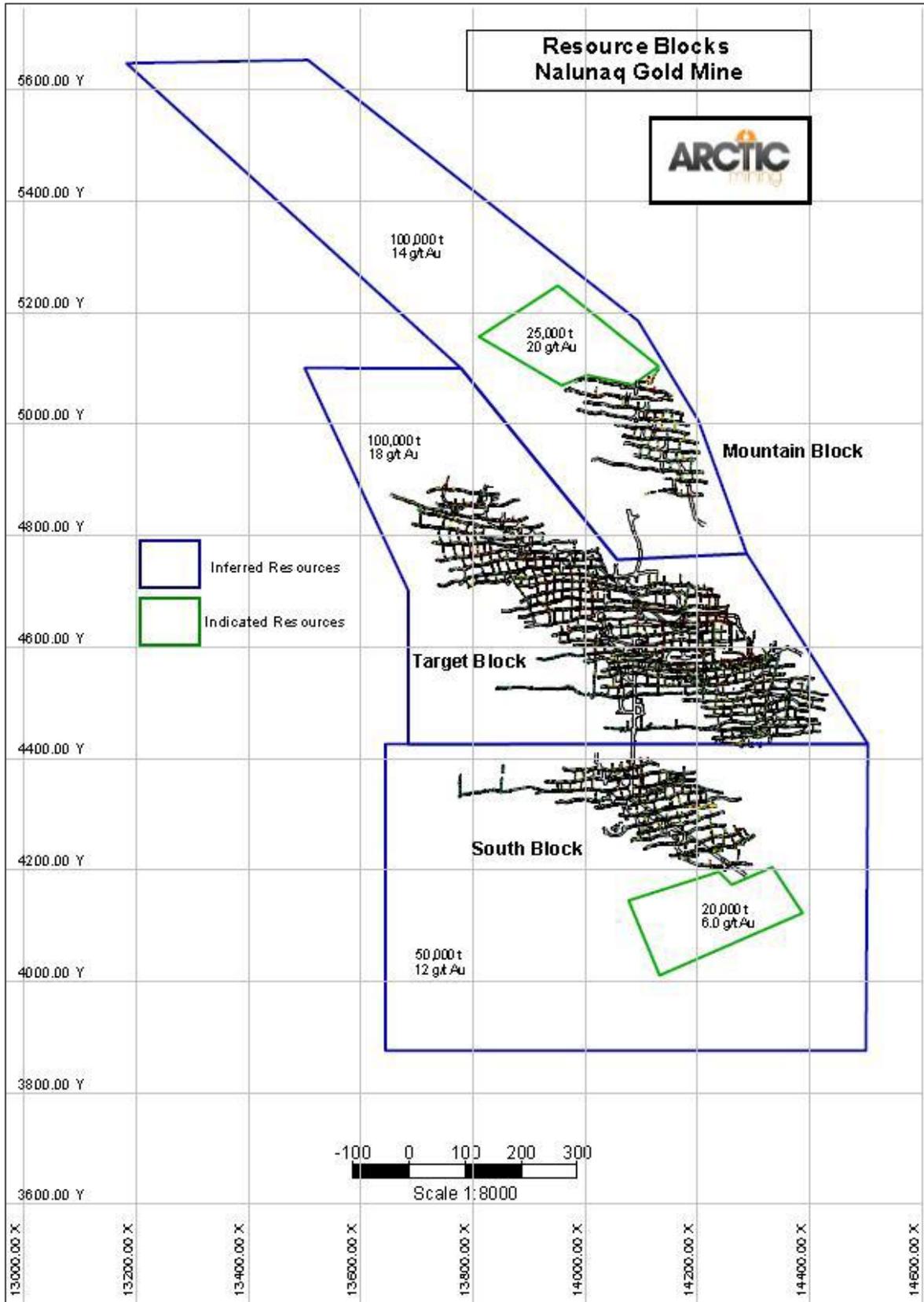
Source: Graham, 2014

Figure 6-4 Nalunaq mine plan showing locations of the non-compliant Indicated resources and reserves (coordinates in historical mine grid)



Source: From Graham (2014)

Figure 6-5 Nalunaq mine plan showing the location of Inferred and Indicated resource blocks (coordinates in historical mine grid)



Source: From Graham (2014)

6.5 Previous Mineral Reserve Estimates

No previous Mineral Reserve estimates have been reported at Nalunaq.

6.6 Production History

Crew Gold commenced mining at Nalunaq in 2004 and owned and operated the mine until July 2009 with ore shipped for processing in Spain and later in Newfoundland.

Shipments to the toll milling sites were independently audited by Holland & Holland with shipments 1-10 being processed in Rio Narcea Gold Mines (RNGM), Spain between 2004 and 2006. Subsequently shipments 11-42 were processed at Nugget Pond mill in Newfoundland from 2007 and 2009. Due to the shipments being infrequent as a result of numerous factors (mine productivity, ice limiting port access etc.) there is a lag between ore shipped and milled and so direct reconciliation is challenging, however, Bara compiled all available Holland & Holland reports and as such an updated collation of the production history based on the mill data has been derived and is provided in Table 6-8 based on the effective year of the Holland & Holland report.

Table 6-8 Nalunaq historical production by year

Processing plant	Effective date	Nugget Pond ore milled (DMT)	Calculated ore grade (Au g/t)	Recovery (%)	Recovered gold (oz)
RNGM, Spain	2004	94,281	17.12	97.31	50,494
	2005*	147,924	17.78	96.61	81,807
	2006*	73,784	16.19	95.84	37,038
Subtotal, RNGM	2004-6	315,989	17.21	96.84	169,339
Nugget Pond, Newfoundland	2007	120,069	15.29	94.46	55,776
	2008	141,665	12.74	94.29	54,672
	2009	78,937	13.33	94.88	31,873
Subtotal, Nugget Pond	2007-9	340,671	13.77	94.49	142,321
TOTAL	2004-9	656,660	15.43	95.49	311,660

*Original Holland & Holland reports for shipments 7&8 (2005) and 9 (2006) were not available to independently verify and so previous SRK (2022) collated data for these shipments were used.

All underground mining activities ceased by 28 February 2009 and Nalunaq was placed on care and maintenance. Crew Gold sold the mine and all associated infrastructure to Angus & Ross Plc (which became Angel Mining PLC) in early July 2009 for US\$1.5 million.

After acquisition of the Nalunaq Gold Mine assets, the mining permit was transferred to Angel Mining in September 2009. A subsidiary of Angel Mining, Arctic Mining Ltd, carried out all mining operations and installed an underground processing plant in the mine at the 300 Level. This plant required an investment of US\$35 million and comprised a mill and a carbon-in-pulp (CIP) cyanide leaching circuit which fed into a furnace that produced doré bars. The plant was designed for a head grade of 13.5 g/t Au.

The first pour was carried out in late May 2011, with an optimum production target of approximately 24,000 ounces of gold per annum, but this target was never reached. Several problems disrupted early production and the challenging logistics of operating at the site were highlighted.

The average monthly production by Angel Mining from June 2011 to July 2013 was approximately 600 ounces of gold, well short of their target optimum production rate of 2,000 ounces of gold per month. The Angel Mining production rates are also low compared to the average of c. 5,000 ounces of gold per month produced by the Nugget Pond processing plant, when averaged over the 29 months of operation at this plant.

Due to financial difficulties and an inability to repay loans, Angel Mining PLC went into administration on 27 February 2013, and Stephen Cork and Andrew Beckingham of Cork Gully LLP (52 Brook Street, London, W1K 5DS) were appointed Joint Administrators.

Total production for the Arctic Mining period is estimated at 14,823 ounces based on SRK, 2022, where possible original Arctic Mining processing reports were sourced and cross-referenced. This amounted to 15% of the total production period and the tolerance was within 0.5% of the SRK figures.

The Administrators took the decision to keep the mine in production. During this period, Arctic Mining continued mine operations and run-of-mine (ROM) material was predominantly sourced from pillar mining with minor additional ore from level ramping. Problems continued with both mining and processing, and the closure of Nalunaq was announced in October 2013. By 15 November 2013, all mining staff had left and remediation by a local construction company began. All mining equipment and surface infrastructure, including the camp and the port facility (apart from the jetty), was removed or destroyed. The underground processing plant was left in place, and the mine portals were closed with waste rock.

In total, around 326,483 ounces of gold had been produced, 311,660 ounces being from Crew Gold's operation.

In 2014, ownership of the exploitation licence was formally transferred from Angel Mining to FBC although it remained in the name of Angel Mining. FBC Mining entered a joint venture agreement with ARC which was approved by the Government of Greenland and signed on 17 July 2015, and the licence is now held in the name of a Greenlandic joint venture company, Nalunaq A/S, which is a wholly owned subsidiary of Amaroq Minerals Ltd.

Exploration has been carried out at Nalunaq every year since, including drilling and surface sampling. Mining restarted in 2024 with the first gold pour achieved on 27 November 2024 and production forecast to ramp-up throughout 2025.

7 GEOLOGICAL SETTING AND MINERALISATION

7.1 Regional Geology

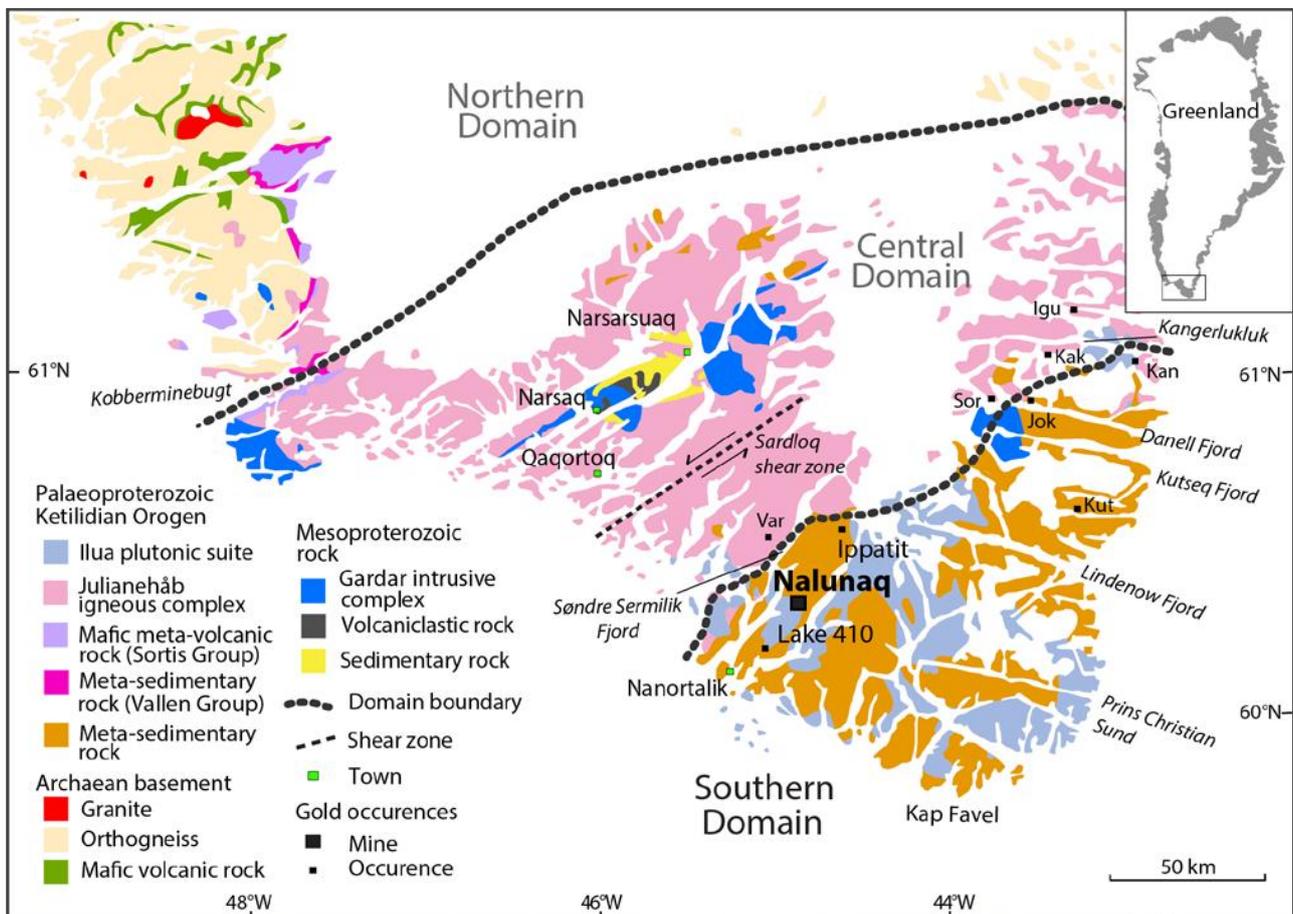
7.1.1 South Greenland

The geology of south Greenland is dominated by a well-exposed and essentially complete transect through the Paleoproterozoic Ketilidian Orogenic Belt, with an age range of c. 1.85–1.73 Ga (Vestergaard et al., 2022). The Ketilidian Orogen is interpreted to have formed due to northwards-dipping oblique subduction of an oceanic plate beneath the Archean North Atlantic Craton, located to the present-day north. Ketilidian accretion and subduction-related magmatism formed a component of the Great Paleoproterozoic Accretionary Orogen, which existed along an active margin spanning Laurentia (south Greenland and North America) and Baltica (northeast Europe), which formed the supercontinent Nuna.

Two classifications are in use for the geology of south Greenland (see Figure 7-1):

- The **geological** terranes: the Ketilidian Border Zone, the Julianehåb Batholith Zone, the Psammite Zone and the Pelite Zone (e.g. Secher et al., 2008).
- The **metallogenic** domains: the Northern, Central and Southern domains (Steenfelt et al., 2016)

Figure 7-1 Simplified geological map of south Greenland, highlighting the major tectonic (and metallogenic) divisions of the Ketilidian Orogen and associated gold occurrences – Nalunaq is situated in the Southern Domain



Source: Map taken from Bell, 2016

Abbreviated gold occurrence names are: Igu – Igutsait, Jok – Jokum’s Shear, Kan – Kangerluk, Kak – Kangerluluk, Kut – Kutseq, Sor – Sorte Nunatak, Var – Vagar, modified from Garde et al. (2002), Stendal and Frei (2000); Schlatter and Hughes (2014) and Steenfelt et al. (2016).

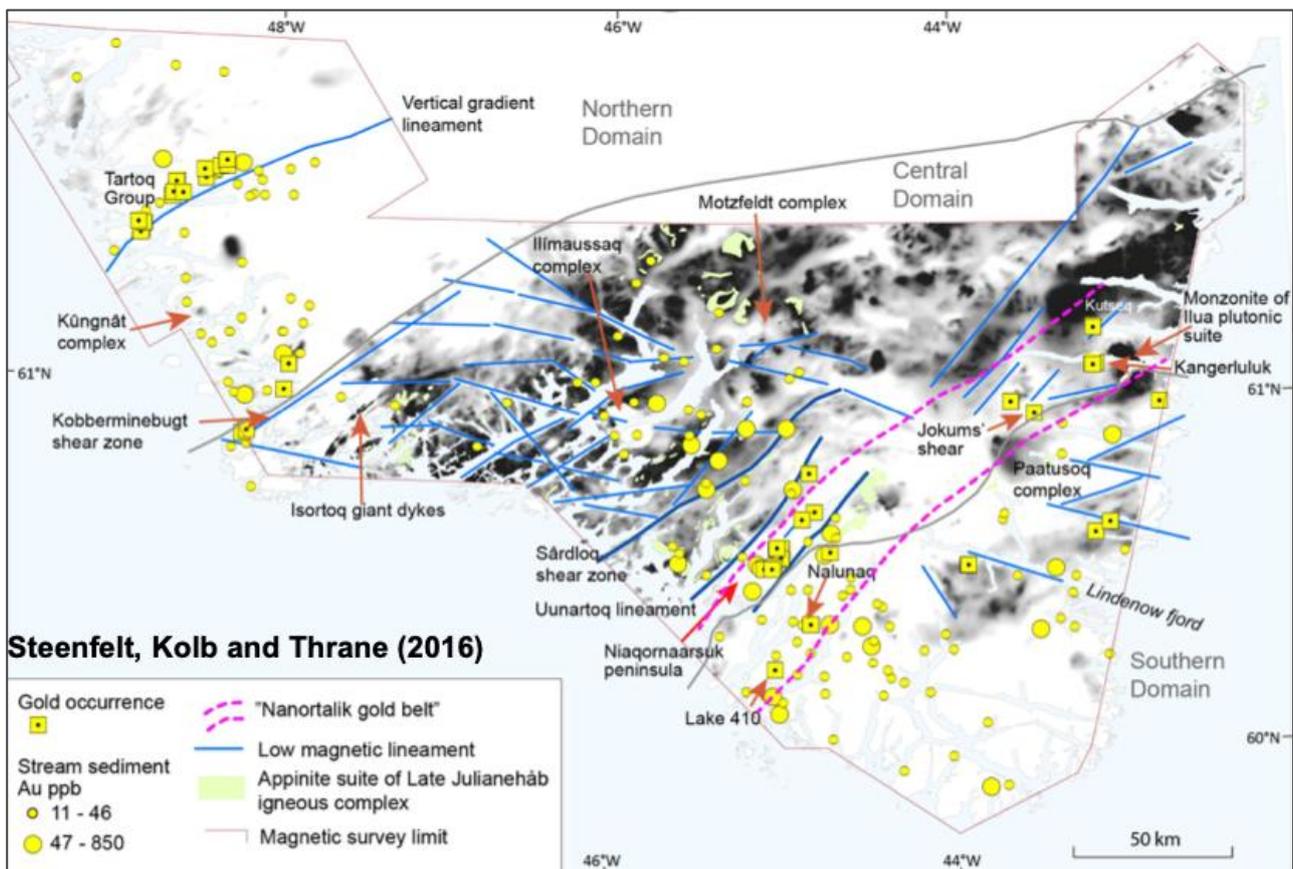
7.1.2 Nalunaq and the Nanortalik Gold Belt

Nalunaq lies within the Psammite Zone in southern Greenland that hosts the Nanortalik Gold Belt (Hughes et al., 2013). This zone is part of the Ketilidian Mobile Belt which evolved between 1850 Ma and 1725 Ma during interpreted northward subduction of an oceanic plate under the southern margin of the Archean North Atlantic Craton.

The Nanortalik Gold Belt forms a >150 km long and c. 35 km wide corridor near the boundary between the Psammite Zone and the Julianehåb Batholith Zone, hosting a significant number of gold occurrences. With the exception of Nalunaq, these are at an early stage of exploration or have not yet been systematically explored. Known gold occurrences are shown in Figure 7-2, whilst stream sediment and heavy mineral concentrate geochemical data show numerous anomalies for gold and gold pathfinder elements, indicating further unexplored potential in the area (Figure 7-3).

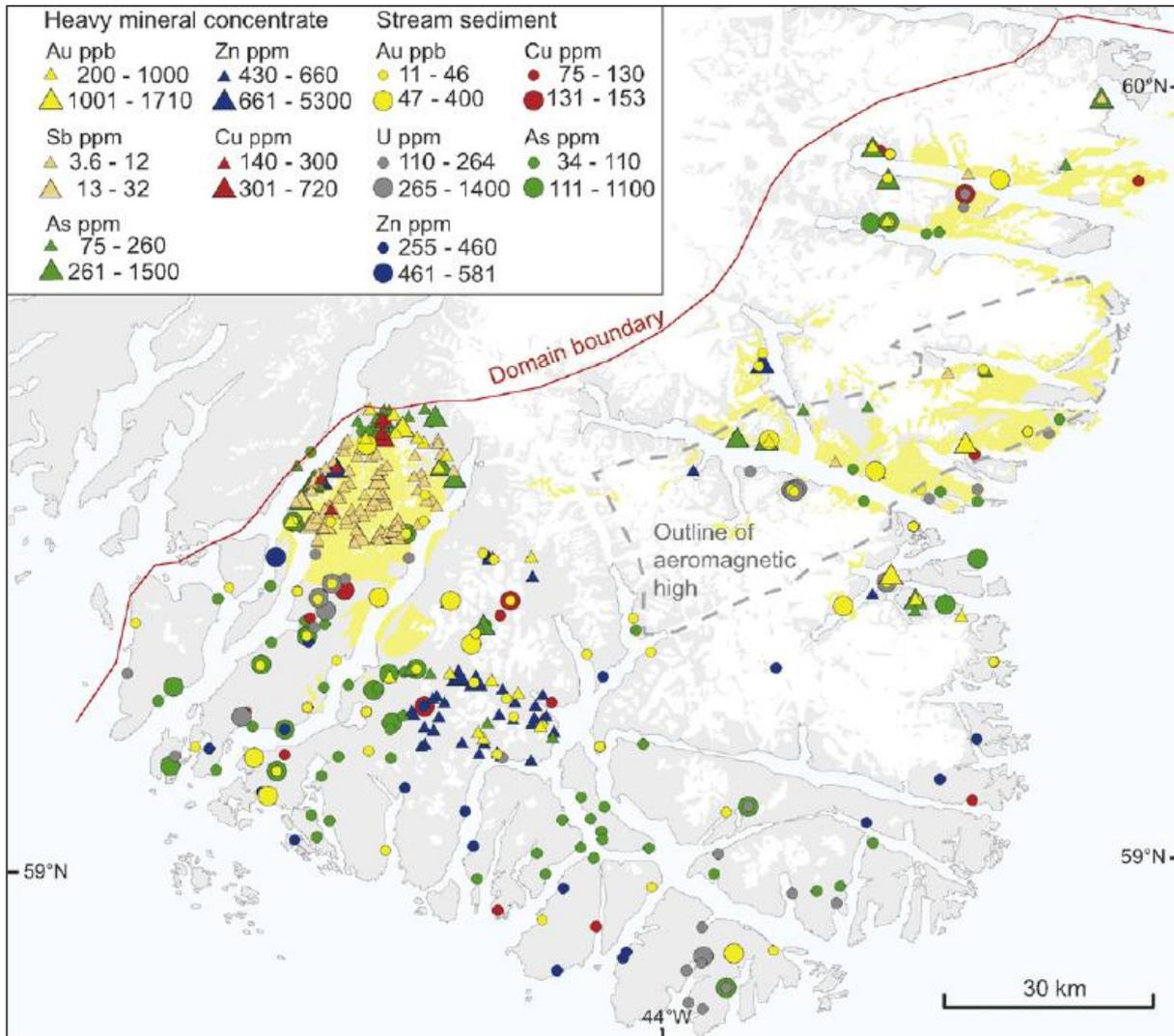
It has been proposed that the Nanortalik Gold Belt is a continuation of the Swedish Gold Line: similarities to gold mineralisation of the same age and orogenic setting have been noted (Schlatter et al., 2014).

Figure 7-2 Nanortalik Gold Belt and regional occurrences; geology and lineament framework



Source: Steenfelt, Kolb and Thrane, 2016

Figure 7-3 Nanortalik Gold Belt – stream sediment (<0.1 mm fraction) and heavy mineral concentrate anomalies defined as values above the 95th percentile of the frequency distributions of data for entire south Greenland; large symbols are above the 99th percentile



Source: Steenfelt, Kolb and Thrane, 2016

Note: Yellow areas are indicative of greenschist to amphibolite facies meta-arkose lithologies, favourable for hosting orogenic gold.

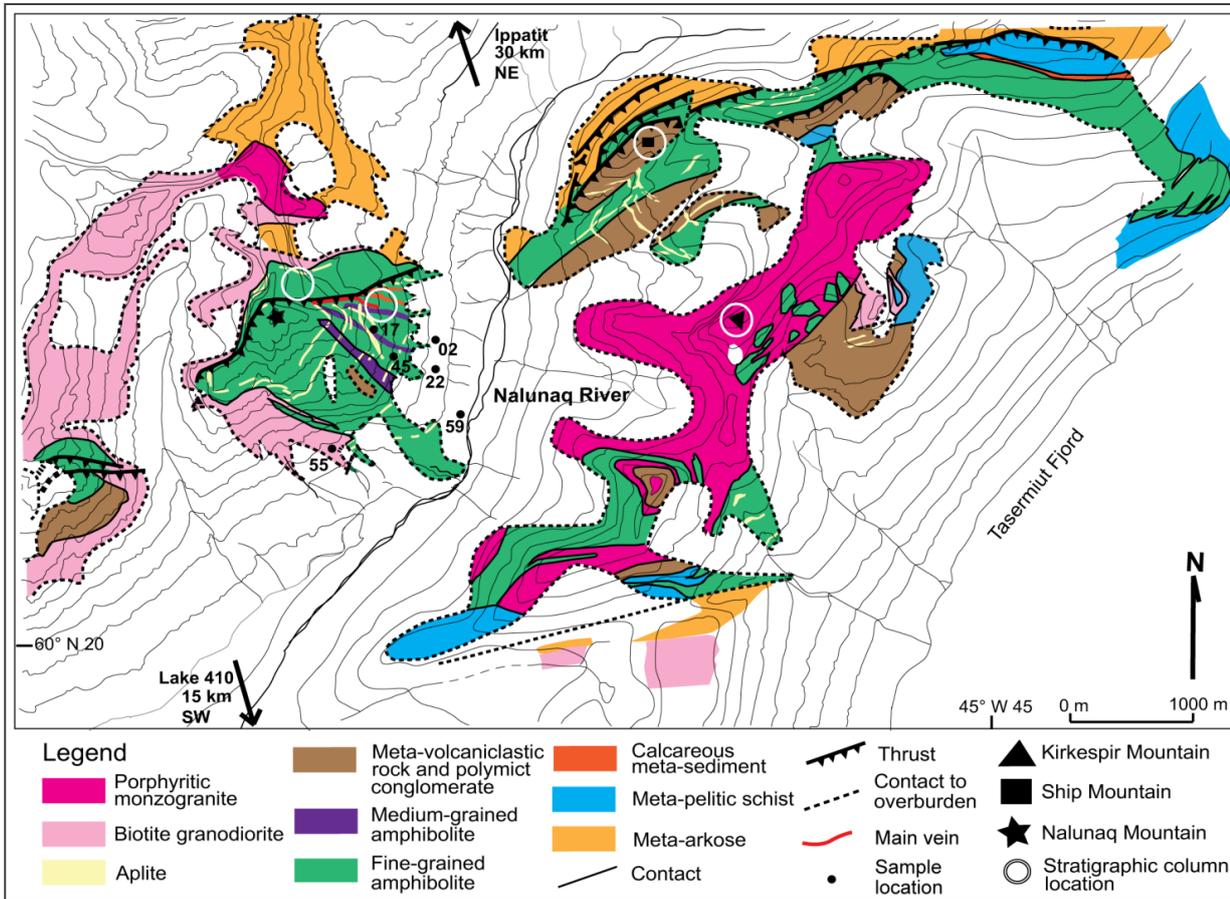
7.2 Local Geology

7.2.1 Overview

The geology of the Nalunaq Mountain is dominated by a package of fine- to medium-grained tholeiitic basalt flows and locally coarser, sub-concordant doleritic sills. This package is part of the Nanortalik Nappe and has been thrust over metasediments. The sequence is intruded by later granites and several generations of late aplite and pegmatite dykes.

Figure 7-4 shows the geology of the Kirkespir Valley including Nalunaq, and Figure 7-5 shows simplified stratigraphic columns for various locations in the area, highlighting the base of the Nanortalik Nappe. Locations of the stratigraphic columns shown in are marked by white circles in Figure 7-4. Sample locations relate to material taken by Bell (2016) for U/Pb dating. In Figure 7-5, lithological units below the thrust correlate throughout the area, marking the base of the Nappe (modified from Petersen, 1993, and Kaltoft et al., 2000).

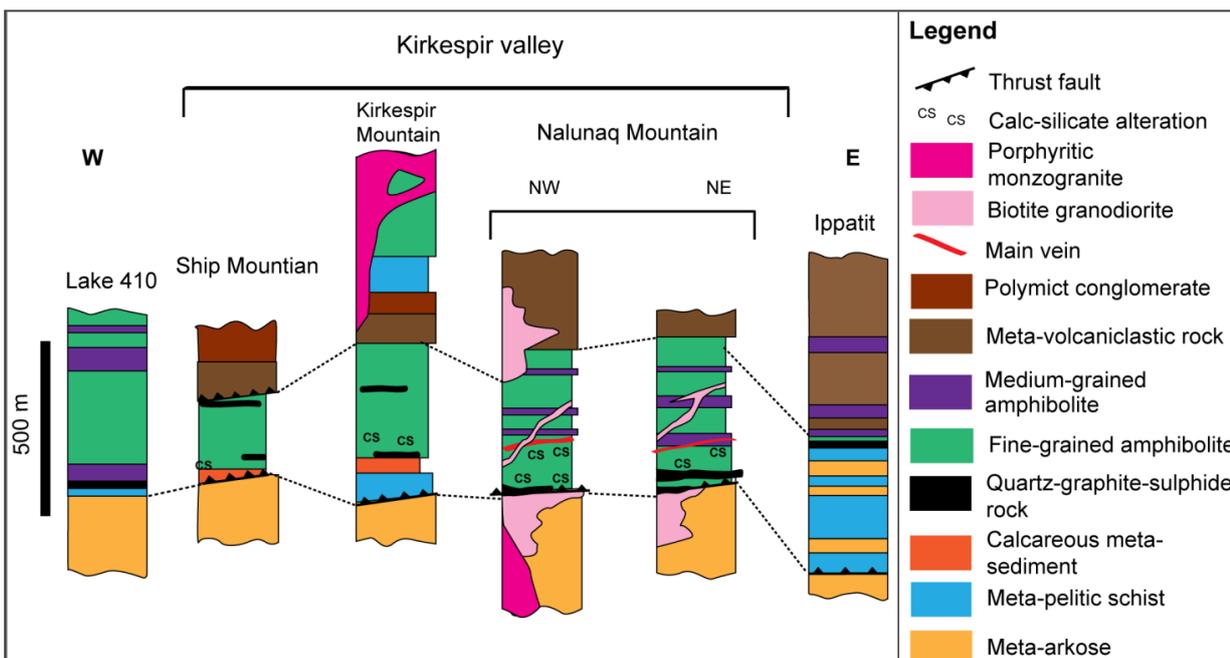
Figure 7-4 Map of the Kirkespir Valley showing the geology of Nalunaq, Kirkespir and Ship mountains



Source: Bell, 2016, modified from Petersen, 1993

Note: Locations of the stratigraphic columns shown in the subsequent figure are marked by white circles. Sample locations relate to material taken by Bell (2016) for U/Pb dating.

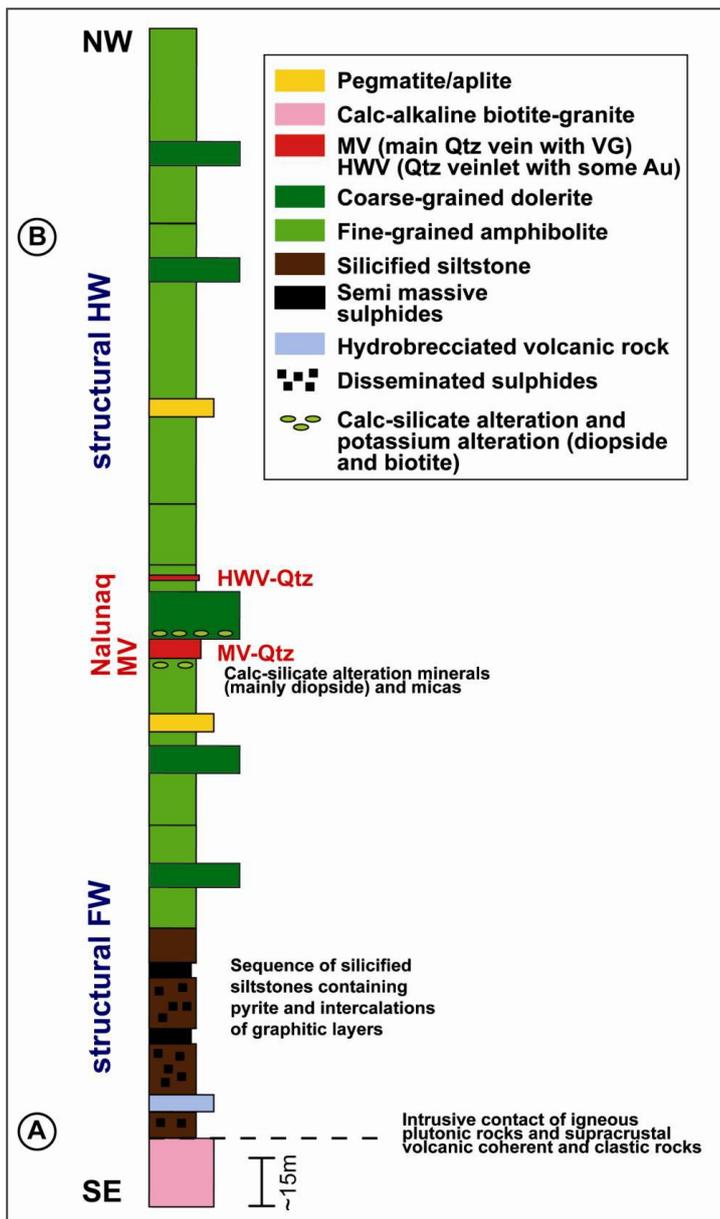
Figure 7-5 Schematic stratigraphic sequences for sections of the Nanortalik Nappe (Bell, 2016)



Note: Lithological units below the thrust correlate throughout the area, marking the base of the Nappe (modified from Petersen, 1993, and Kaltoft et al., 2000).

Most previous workers believe that the gold-bearing quartz vein is associated with a shear zone that is several metres thick (Secher et al., 2008). The volcanic host rocks have been metamorphosed to upper greenschist or amphibolite facies. Following a review of data from geological mapping (Petersen, 1993; Kaltoft et al., 2000) and drilling programs (Schlatter, 1997; Schlatter, 1998; Kludt and Schlatter, 2000; Schlatter and Aasly, 2001), Schlatter and Olsen (2011) drew up a simplified stratigraphic column through the ore-bearing horizons at Nalunaq (Figure 7-6).

Figure 7-6 Simplified stratigraphic column for the Nalunaq Mountain through the ore-bearing horizons

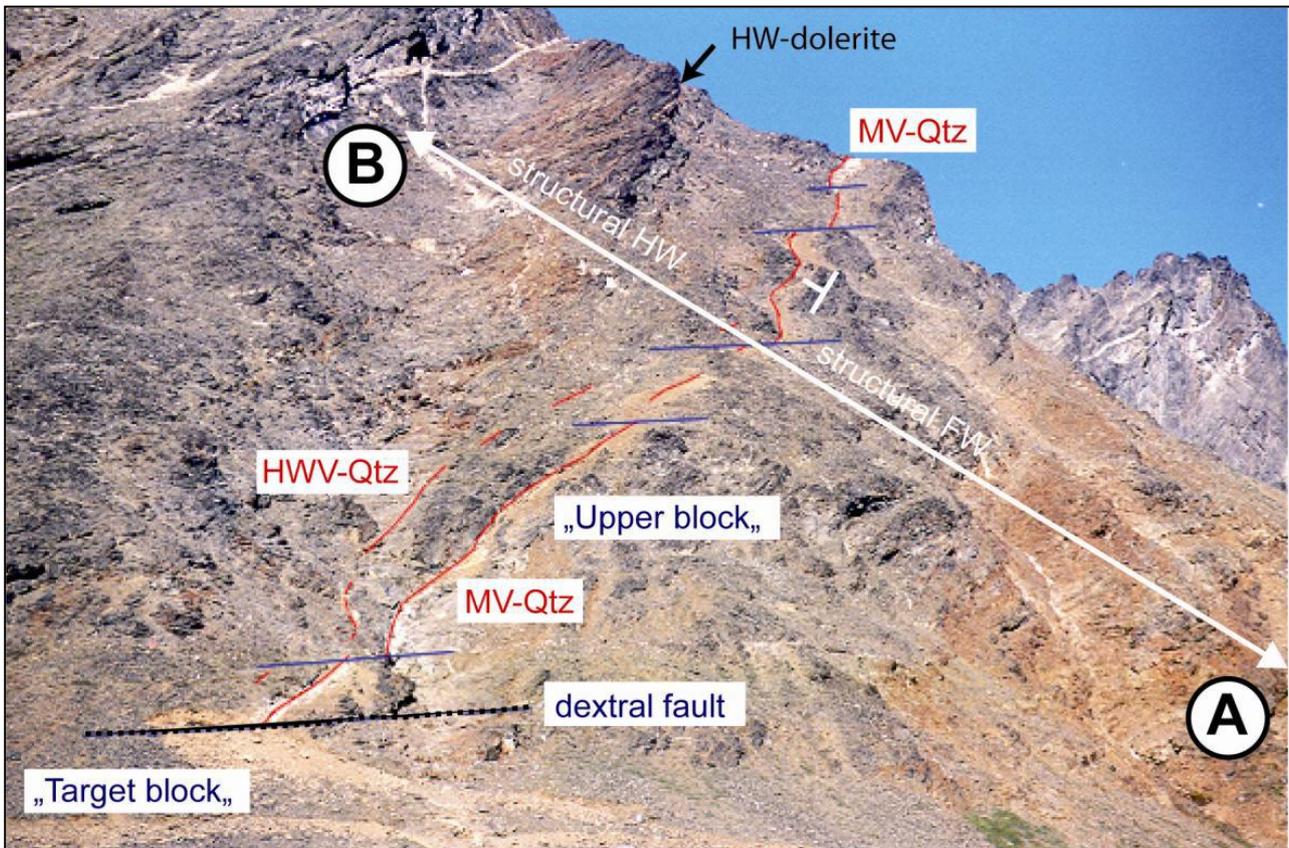


Source: Schlatter and Olsen, 2011

Due to the lack of primary volcanic textures and a lack of age relations of the rock sequence, the true stratigraphic way up is unknown. The stratigraphy has therefore been assigned into the Structural Footwall (“FW”) and Structural Hangingwall (“HW”) with respect to the main gold-mineralised quartz vein (Nalunaq Main Vein, “MV”) (Schlatter and Olsen, 2011).

There is a less continuous and thinner auriferous quartz vein about 15–20 m above the MV known as the Hangingwall Vein (“HWV”). Additionally, exploration work carried out by Amaroq since 2022 has identified an auriferous quartz vein envelope situated approximately 75 m above MV (the “75 Vein”).

Figure 7-7 Photograph from Schlatter and Olsen (2011) of the southeast face of the Nalunaq Mountain showing the principal stratigraphic components



Source: Amaroq

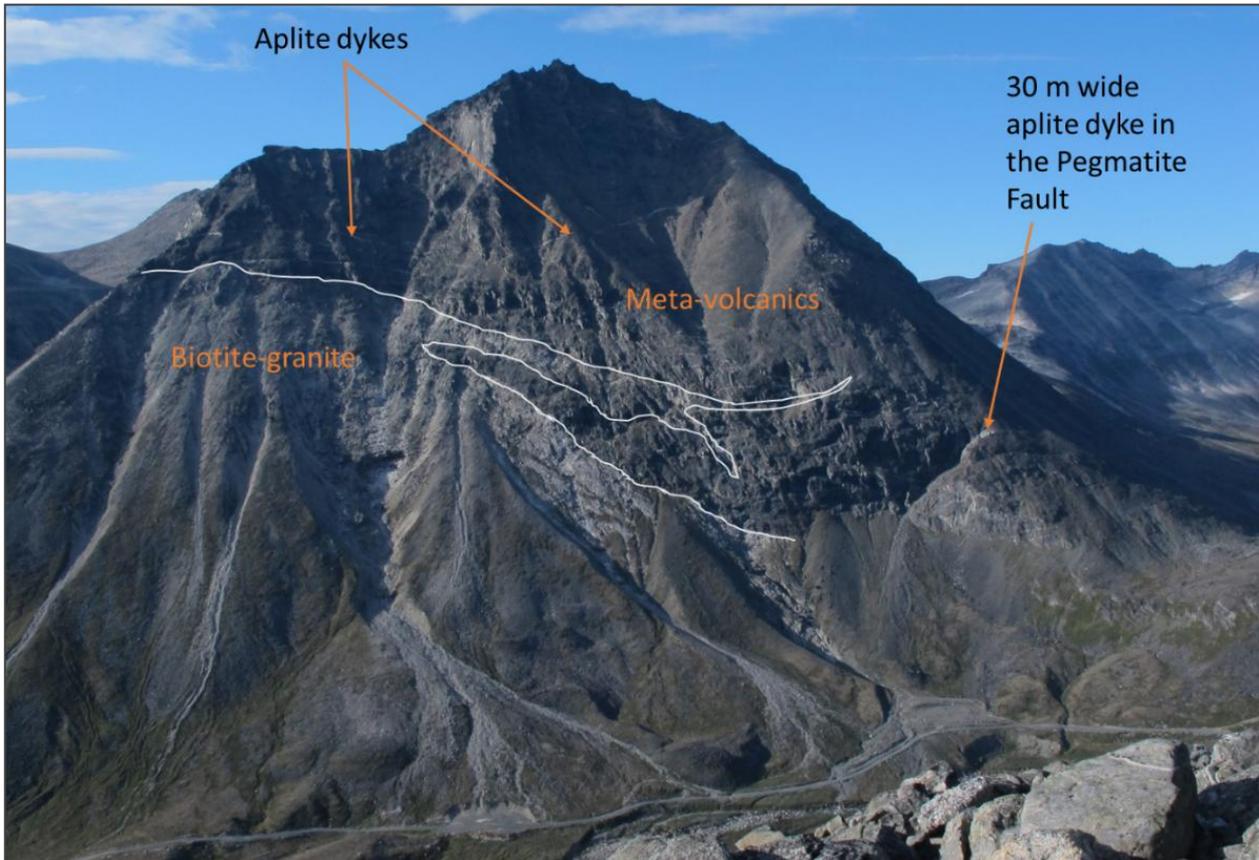
Note: The labels A and B refer to positions on the stratigraphic column shown in the previous figure. Note that “Upper Block” in this figure refers to Mountain Block.

7.2.2 Structural Footwall

The FW comprises metavolcanics intruded by biotite granites, and the contacts between these can be seen at surface (Figure 7-8) and in drill core.

Volcanic and volcanoclastic rocks comprise a sequence of silicified siltstone with abundant sulphides and intercalated graphitic beds, fine-grained amphibolite and coarse-grained dolerite sills or dykes which can be several metres thick, all intruded by thin aplite dykes or sills. Greenish calc-silicate alteration appears to be more common in the FW than the HW, present as elongated lenses and stringers (Figure 7-9) that become increasingly parallel to the MV the closer they become to it (Kolb, 2013). Whilst most authors refer to this alteration as calc-silicate, it more correctly comprises garnet-epidote and clinopyroxene alteration (Kolb, 2013). The sequence of sulphide-rich volcanics represent part of the lowermost stratigraphy of the Nanortalik Nappe and are the base of the mineralised thrust sheet.

Figure 7-8 Photograph of the southwestern face of the Nalunaq Mountain showing the biotite-granite intrusion in the FW, meta-volcanics that host the Main Vein and outcrops of aplite dykes



Source: SRK ES, 2016

Figure 7-9 Typical FW lithology showing conjugate veins and stringers of calc-silicate alteration



Source: SRK ES, 2016

7.2.3 Nalunaq Main Vein

The main mineralised horizon is represented by the 0.5–2.0 m thick MV, commonly with increased alteration extending for up to 1.0–1.5 m in width on both sides of the vein. The MV slightly crosscuts the foliation and can be traced at surface for over 1 km on the east- and north-facing slopes of Nalunaq Mountain, about 250 m across the western face of the mountain, and at least 800 m down the southwestern slopes.

7.2.4 Hangingwall Vein

The HWV, situated approximately 15–20 m above the MV, is less continuous, thinner (typically only up to 10 cm thickness) and lower grade than the MV. It pinches out along strike and may only be represented by thin seams of calc-silicate alteration and silicification in the volcanic rocks, or it is not present at all. It is possible that it represents a splay off the MV (Schlatter and Olsen, 2011). Amaroq has not observed this structure underground but noted its presence above the MV on the west face of the mountain. Amaroq considers that the HWV may provide additional opportunities for exploration.

7.2.5 75 Vein

A mineralised quartz vein structure known as “75 Vein” (due to its approximate relative position 75 m above the MV) with comparable characteristics to MV was identified in 2022 and is being assessed as part of ongoing exploratory activities. The vein was identified via the use of drone imagery (clarifying its relative position), re-sampling of historical drillholes, recent drill campaigns, and geological modelling which has demonstrated its potential for continuity. 75 Vein is considered a priority exploration target.

7.2.6 Structural Hangingwall

The HW (see Figure 7-10 and Figure 7-11) consists of a sequence of fine-grained amphibolite and medium- to coarse-grained dolerites, with the MV often carrying increased gold grades at the contact with these dolerites.

They are distinctly more massive and darker than FW lithologies (Figure 7-11) and this colour/texture contrast can be seen at distance on surface (Figure 7-7 and Figure 7-11). Several generations of pegmatite and aplite crosscut these lithologies. Figure 7-11 shows the darker HW lithologies above the eroded trace of the MV. Patches of the MV can be seen exposed on the FW surface below and the lower climber to the right-hand side. Figure 7-11 shows how all HW units are cut by aplite dykes.

Figure 7-10 Dark coarse-grained meta-dolerite in the HW showing some garnet-epidote alteration (this is less common in the HW than the FW)



Source: SRK ES, 2016

Figure 7-11 Climbers sampling the MV where exposed on the southwest side of the mountain



Source: SRK ES, 2016

Note the darker HW lithologies above the eroded trace of the MV. Patches of the MV can be seen exposed on the FW surface below and the lower climber to his right-hand side. All units cut by aplite dykes (lighter linear features).

7.2.7 Structural Blocks of the Nalunaq Mountain

The Nalunaq deposit has been divided into four main blocks based on their division by post-mineralisation faulting. From southeast to northwest, these are named Valley Block, South Block, Target Block and Mountain Block.

The most significant fault is between the South Block and the Target Block. This fault, known as Pegmatite Fault despite not exhibiting particularly pegmatitic features, shows normal fault movement resulting in about 80 m of vertical offset of the South Block relative to the Target Block. The fault also exhibits dextral displacement interpreted by Amaroq to be approximately 85 m. It is well exposed on surface and intruded by a 30 m thick aplite dyke (Figure 7-12).

Figure 7-12 The Pegmatite Fault (dashed) exposed on the south side of the mountain with the South Block to the east and the Target Block to the west; it has been intruded by a 30 m wide aplite dyke



Source: SRK ES, 2016

Lind et al. (2001) suggest that the Target Block is separated from the Mountain Block by a dextral fault with minor displacement of only a few metres, known as the Mosquito Net Fault. Other significant faults that cut the MV, albeit with much smaller offsets than the Pegmatite Fault, include “Clay Fault” and “Your Fault”.

Nalunaq exhibits structural complexity; understanding the role of these faults is an ongoing consideration in exploration and resource modelling.

7.2.8 Influences of Aplite Dykes and Sills

Numerous aplite dykes and sills are found within the mine area and throughout Nalunaq Mountain. These emanate from the granitic intrusions that underlie the mountain (Figure 7-13) and crosscut the main mineralised body (Figure 7-14 and Figure 7-15).

These intrusions are influential with respect to mine planning: where they occur, this can result in localised dilution of MV, for example. It is observed that such intrusions become more numerous proximal to granitic bodies, that dykes have intruded faults (Figure 7-16) and that faulting has also occurred post-intrusion (Figure 7-17). This may lead to a potential offset of gold-bearing veins and is taken into account in the design of underground development.

In terms of the mineralising system, these intrusions may also have a role in the remobilisation of gold; this requires further study.

Figure 7-13 Views of the granitic intrusion that underlies Nalunaq Mountain and aplite dykes/sills that emanate from it (left – northern side of mountain; right – southern side of mountain)



Source: SRK ES, 2016

Figure 7-14 Aplite dyke on the main ramp adjacent to the 560 Level crosscutting FW lithologies



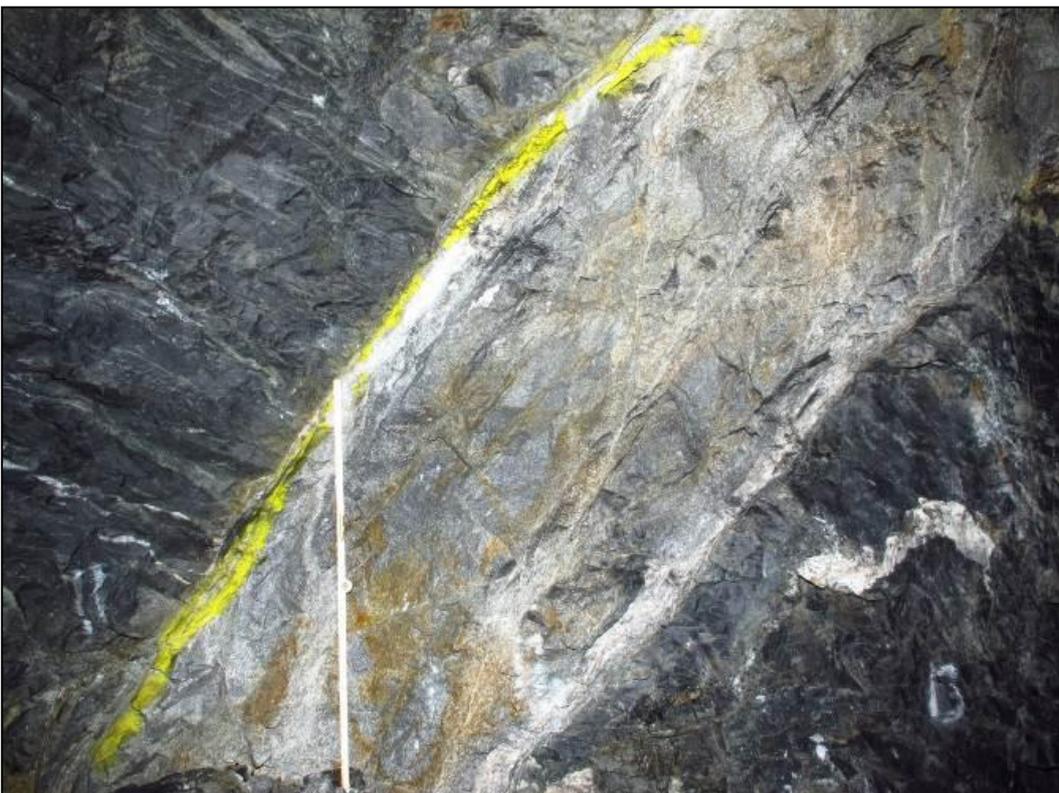
Source: SRK ES, 2016

Figure 7-15 580 Level ventilation raise – on an aplite dyke but apparently sampled as shown by blue sampling lines



Source: SRK ES, 2016

Figure 7-16 Aplite dyke exposed on the wall of the 350 Level West (there is fault gouge at the margins of the dyke indicating movement post-emplacment)



Source: SRK ES, 2016

Figure 7-17 Large aplite dyke on the 720 Level Mountain Block West exploiting a fault (Main Vein displaced)



Source: SRK ES, 2016

Figure 7-18 Aplite dyke exploiting the Main Vein structure on the 600 Level West



Source: SRK ES, 2016

7.2.9 Crosscutting Dolerite Dykes

The metavolcanic sequence is cut by several dolerite dykes which are differentiated from surrounding amphibolites mainly by their coarser grain size (Figure 7-19).

Figure 7-19 Main Vein (top row) with fine-grained banded amphibolite in the hangingwall and immediate footwall, followed by 13 m of medium-grained dolerite in the footwall



Source: Amaroq

These dykes are geochemically equivalent to the finer-grained amphibolites but are generally weakly altered. The dolerite dykes are only slightly discordant to bedding in the metavolcanic sequence and are typically on the order of 10–20 m thick. In the Valley Block, there is frequently a dolerite in the immediate footwall to Main Vein, in contrast to it being more common in the hangingwall of Target Block. This suggests that mineralised shoots are not only developed along one contact of the dolerite dykes, but at both contacts.

Mineralisation also occurs within the dykes and for up to approximately 10 m from the contacts. Dolerites have been mapped on surface and frequently occur in series of avalanche gullies on the east face of Nalunaq Mountain.

7.3 Mineralisation

7.3.1 Overview

The presence of gold mineralisation in south Greenland was first recognised in the early 1990s. Gold occurs in structures both within the supracrustal rocks of the Psammite Zone as well as in the Julianeåb Batholith. The gold is typically associated with arsenic-bismuth-tungsten-copper-

(molybdenum). Arsenic is found in small but widespread amounts in the region and is considered a good proxy for gold mineralisation. Mineralisation at Nalunaq, in common with other lode-gold style systems are generally characterised by a high nugget effect (>50%) and the presence of coarse gold particles (>100 µm in size).

Kaltoft et al. (2000) report that the principal mineralised body at Nalunaq, the Main Vein, and associated zones of veining are hosted within a “continuous ductile shear zone” that is related to deformation and metamorphism associated with the regional Nanortalik Nappe structure, emplaced in a brittle-ductile regime during multiple influxes of hypothermal fluids (300–600°C).

Kaltoft et al. (2000) suggest that mineralisation is related to the late-stage deformation events of the Ketilidian Orogeny and were contemporaneous with granite emplacement.

The Main Vein structure (Figure 7-20) varies in width from 0.05 m to 2.00 m, maintains an average dip of 38° towards the southeast, and contains high and sometimes bonanza gold grades (up to 3,777.0 g/t Au over 0.8 m in NQ154, from 92.44 m to 93.24 m). Exposures of the vein in underground development often display pinch and swell structures, show evidence of both compressive and dilatational post-mineralisation deformation, and are cut by late aplitic dykes.

Figure 7-20 Classic form of the Main Vein in the Mountain Block showing grey vitreous quartz (630 Level, stope #1)



Source: SRK ES, 2016

The vein also often displays perpendicular quartz-filled tension gashes (Figure 7-21). These may be developed either upwards from the Main Vein or, more rarely, downwards (Figure 7-22). Their presence alludes to deformation in a brittle environment, rather than ductile as suggested by previous workers (e.g. Kaltoft et al., 2000).

Figure 7-21 The Main Vein structure in the Target Block exhibiting quartz-filled tension gashes perpendicular to the Main Vein



Source: SRK ES, 2016

Figure 7-22 Downward-developed tension gashes as part of a “stacked” Main Vein (520 Level, stope #28)



Source: SRK ES, 2016

Gold occurs mostly in the native form and locally as the gold-bismuth alloy maldonite and is associated with native bismuth (Grammatikopoulos et al., 2004). Gold fineness ranges from about 800 to 950. Lollingite and arsenopyrite are also observed. Native gold particles range in size from a few microns up to 8 mm, with coarse visible gold being common in the high-grade sections of the Main Vein.

7.3.2 Vein Complexities

As well as complications caused by offsets on late faults, there are also complexities within the vein itself.

Whilst the basic structure that hosts the Main Vein shows continuity over thousands of metres, the vein is more variable and shows marked pinching, swelling and splitting, sometimes reducing from tens of centimetres in width to a few centimetres or pinching-out completely over a few metres (Figure 7-23). Where the vein pinches out, the hosting structure can still be identified, often with hydrothermal alteration and some minor, poorly mineralised veinlets. In some areas, the Main Vein is cut or invaded by aplite dykes (Figure 7-19).

Figure 7-23 Main Vein reducing in thickness from 110 cm in the foreground to 15 cm over a distance of only 4 m in the 390 Level East reef drive



Source: SRK ES, 2016

7.3.3 Mineralisation Controls

As an orogenic system, the principal controls on mineralisation are pressure and temperature changes affecting the solubility of gold complexes (e.g. $\text{AuHS}(\text{H}_2\text{S})_3^0$ and to a lesser extent AuCl ; Smith et al., 2021) and their stability respectively, fluid composition and mixing, oxygen fugacity ($f\text{O}_2$) (redox conditions) and the dynamic history of the structural framework including faulting and shearing which will have had an impact on fluid focusing, permeability and consequently the localisation of gold emplacement. Pressure cycling during seismic slip-related depressurisation events is considered an important contributor (Smith et al., 2021).

One possible control which Amaroq has developed in-house is known as the “Dolerite Dyke Model”, which seeks to explain the locations of observed high-grade plunges in the Mountain, Target and South blocks. This hypothesis works on the premise that weakly to moderately mineralised fluids were trapped at locations aligned with the pre-mineralising and crosscutting dolerite dykes. These locations would impede the progression of the fluids until each trap site progressively failed due to a combination of fluid over-pressure and tectonic events. Each failure or rupture would result in a rapid upward propagation of the fluids and local, but very intense pressure reductions and related high-grade mineralisation through the precipitation of gold. This process is termed as Injection Driven Swarm behaviour and is described and well documented by Hronsky (2019) and Cox et al. (1991). This model has proven useful in targeting and expanding on known mineralisation (e.g. in the Valley Block as well as the predicted existence of the Welcome Block to the southwest of the historical mine). The model has also been used to develop a number of prospective mineralisation corridors up dip from previously known mineralised shoots.

8 DEPOSIT TYPES

The gold mineralisation at Nalunaq is hosted within an amphibolite-granite sequence and presents characteristics of a narrow-vein orogenic “lode-gold” system.

Key characteristics of this system include:

- Vein thickness: Mineralised veins are typically less than 1 m in true thickness, which is consistent with the narrow-vein orogenic gold system model (Lyell et al., 2021).
- Quartz veining: The system remains predominantly characterised by quartz veining, which forms the host for gold mineralisation (Gao et al., 2020).
- Structural control: Gold mineralisation is strongly influenced by structural features such as shear zones, faulting, and deformation, which control the distribution of veins and gold (Gao et al., 2020).
- Hydrothermal alteration: Both the hangingwall and footwall exhibit symmetrical hydrothermal alteration, indicative of fluid movement and interaction with the surrounding rocks (Lyell et al., 2021).
- Gold distribution: The gold is present as coarse, often visible grains (Figure 8-1), which contribute to a nuggety grade distribution, typical of orogenic gold deposits (Lyell et al., 2021).
- Formation conditions: Formation occurred at temperatures between 300°C and 600°C at a depth of approximately 10 km, associated with brittle-ductile deformation typical of the region (Gao et al., 2020).

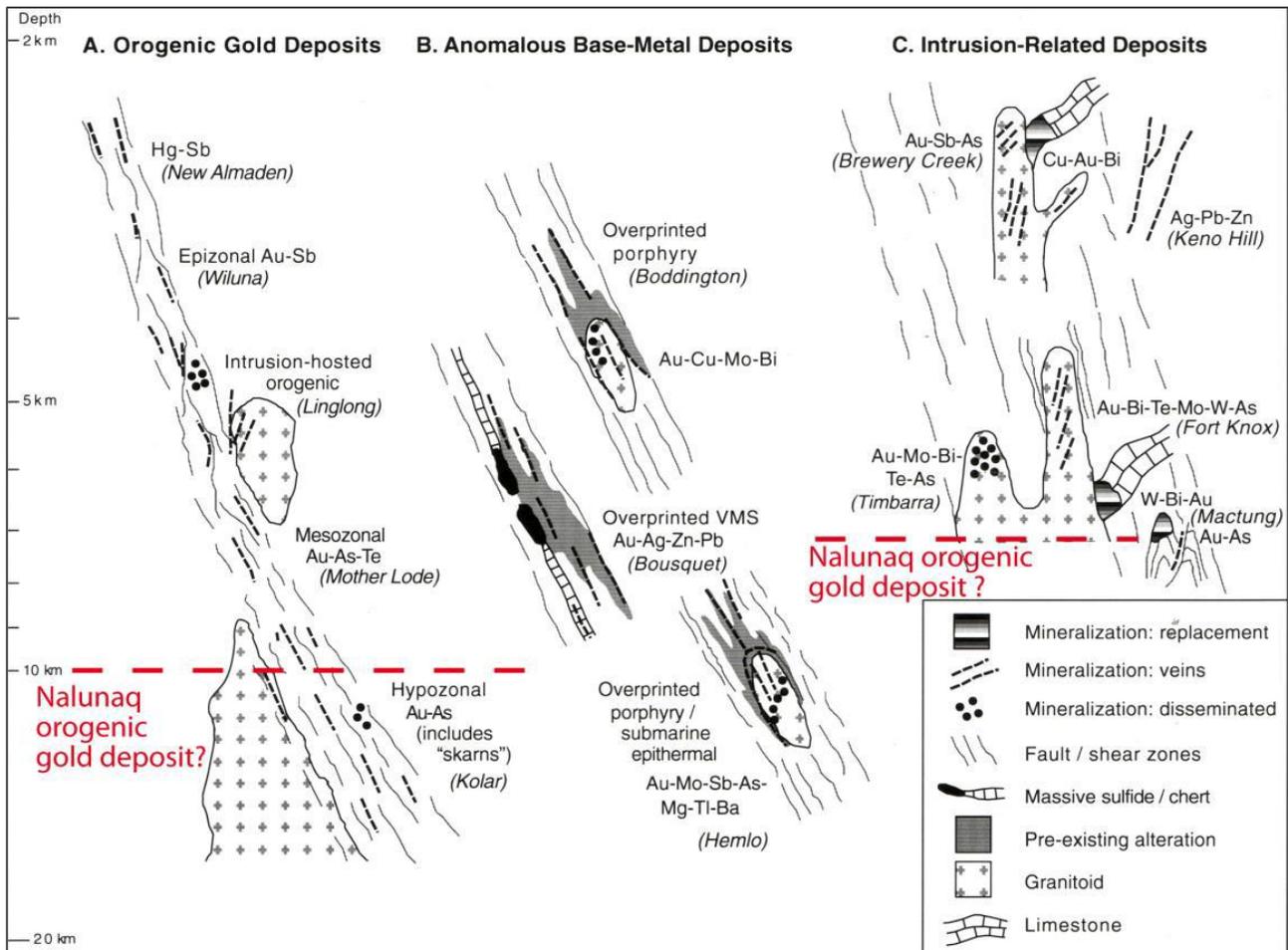
Figure 8-1 High-grade gold-quartz vein sample from the Nalunaq Main Vein containing coarse gold



Source: Crew Gold

Additional sources in the academic literature which support Nalunaq as an orogenic system include Garde et al. (2002; *host rocks*), Stensgaard and Frei (2005(1); *structural control*), Appel (2004; *alteration and mineralisation*), Chadwick and Garde (1996; *tectonic setting*), Stensgaard and Frei (2005(2); *fluid sources*), Bell et al., (2017; *geochronology*) along with Schlatter and Hughes (2014; *gold emplacement style*). A visual classification by Schlatter and Olsen (2011) is presented in Figure 8-2.

Figure 8-2 Classification of gold deposits after Goldfarb et al. (2005), adapted by Schlatter and Olsen (2011) to illustrate Nalunaq’s classification as a hypozonal orogenic gold deposit



Source: Amaroq

High salinity (14–26 wt.% NaCl + CaCl₂ eq.) fluid inclusions were observed in studies of Nalunaq samples by Kaltoft et al. (2000). More “typical” orogenic gold deposits are characterised by low salinity (≤6 wt.% NaCl eq.) fluid inclusions (Groves et al., 2003). This has been interpreted as an indication of an intrusive component (Schlatter and Olsen, 2011). It may suggest that fluids from multiple sources interacted within the structural framework; fluid mixing is a recognised key process in the precipitation of gold in orogenic systems (e.g. Garofalo et al., 2014).

The age of gold mineralisation hosted at Nalunaq has been constrained to 1783–1762 Ma in a recent study which used a combination of field investigation, petrography and U/Pb zircon and titanite geochronology (Bell et al., 2017). This age is consistent with that of the Ketilidian and other economically significant orogenic terranes (Goldfarb et al., 2005; Figure 8-2).

The c. 1.78–1.76 Ga age constraint on gold mineralisation at the Nalunaq deposit is consistent with published data for the Ketilidian Orogen and within a temporal window associated with other economically significant orogenic terranes (from Goldfarb et al., 2005, adapted by Schlatter, 2011).

9 EXPLORATION

9.1 Introduction

The following sections describe exploration, other than drilling, prior to and subsequent to Amaroq's involvement in the Project.

Mineral exploration has been undertaken in the Nalunaq area since the 1970s, initially by the Geological Survey of Greenland, with gold exploration being the predominant focus by various operators subsequent to the first reports of gold in 1986 by Carl Nielsen A/S. Early exploration campaigns involved stream sediment sampling and geological mapping which resulted in the discovery of the Nalunaq Main Vein. Later exploration campaigns included surface channel sampling of the Main Vein, with the involvement of mountaineers to cover steeper ground, and in recent years hyperspectral imaging techniques and drone photography have also been used to explore for strike extensions to known mineralised structures.

9.2 Exploration by Amaroq Minerals (2015 to present)

9.2.1 Main Vein Outcrop Sampling

Following Amaroq's acquisition of the Nalunaq Project, a major objective of the 2015, 2016 and 2017 exploration programs were to locate and sample the suspected continuation of the Main Vein outcrop on the west and southwest faces of Nalunaq Mountain. This would allow for the extension of the Main Vein structure for significant distances up-dip and along strike from historical workings. Due to the very steep terrain, mountaineers were engaged to carry out the sampling. Abseil descents were monitored by two geologist spotters on an opposite mountain who guided the mountaineers via VHF radio to the Main Vein location. The mountaineers then collected samples where possible and used a handheld global positioning system (GPS) to take an averaged (5 minute) location. In addition to sampling the Main Vein, quartz stringer veins were sampled and located by GPS when and where possible. Samples were collected using a geological hammer and biased toward quartz. Samples were no more than 3 kg in size each, due to the access method required. The samples were placed into cotton sample bags, given an ID number and GPS location, and sent to ALS Geochemistry in Loughrea, Ireland for analysis by screen metallics fire assay method Au-SCR24.

Assay results from the 2015 and 2016 programs confirmed the extension of Main Vein along the west and upper southwest faces, with results showing erratic and occasionally high grades (e.g. 32.5 g/t Au from a 0.5 m thick vein). Sample spacing in these campaigns was generally much wider than the 1999 sampling of the east face due to the difficult access. Sampling of the lower parts of the southwest face in 2017 failed to return significant gold grades. It is strongly suspected that the structure being followed by the mountaineering team was not the Main Vein.

In 2017, sampling was also carried out across the "North North Face" (NNF) of Nalunaq Mountain (Figure 9-1), and on the west face of "Ship Mountain", located approximately 2.5 km northeast of Nalunaq on the opposite side of the Kirkespir Valley. No significant gold results were returned from this sampling, although Ship Mountain in particular is still considered under-explored for extensions to the Main Vein or additional mineralised veins.

Figure 9-1 Abseiling during sampling of Nalunaq NNF in 2017 (the same technique was used for all mountaineering sampling campaigns)



Source: Amaroq

In 2022, a further 10 m section of Main Vein was exposed by Amaroq geologists removing scree cover at approximately 820 masl (Figure 9-2). This required significant labour, in part because the scree is underlain by approximately 1 m of finer sediment and soil. Once clear, the full thickness of the vein was sampled every metre. In total, nine channel samples were collected with results grading up to 98.6 g/t Au over 1.05 m, confirming the high-grade nature of the Main Vein in this part of the Mountain Block.

Figure 9-2 Newly uncovered Main Vein at 820 m level, marked up for channel sampling

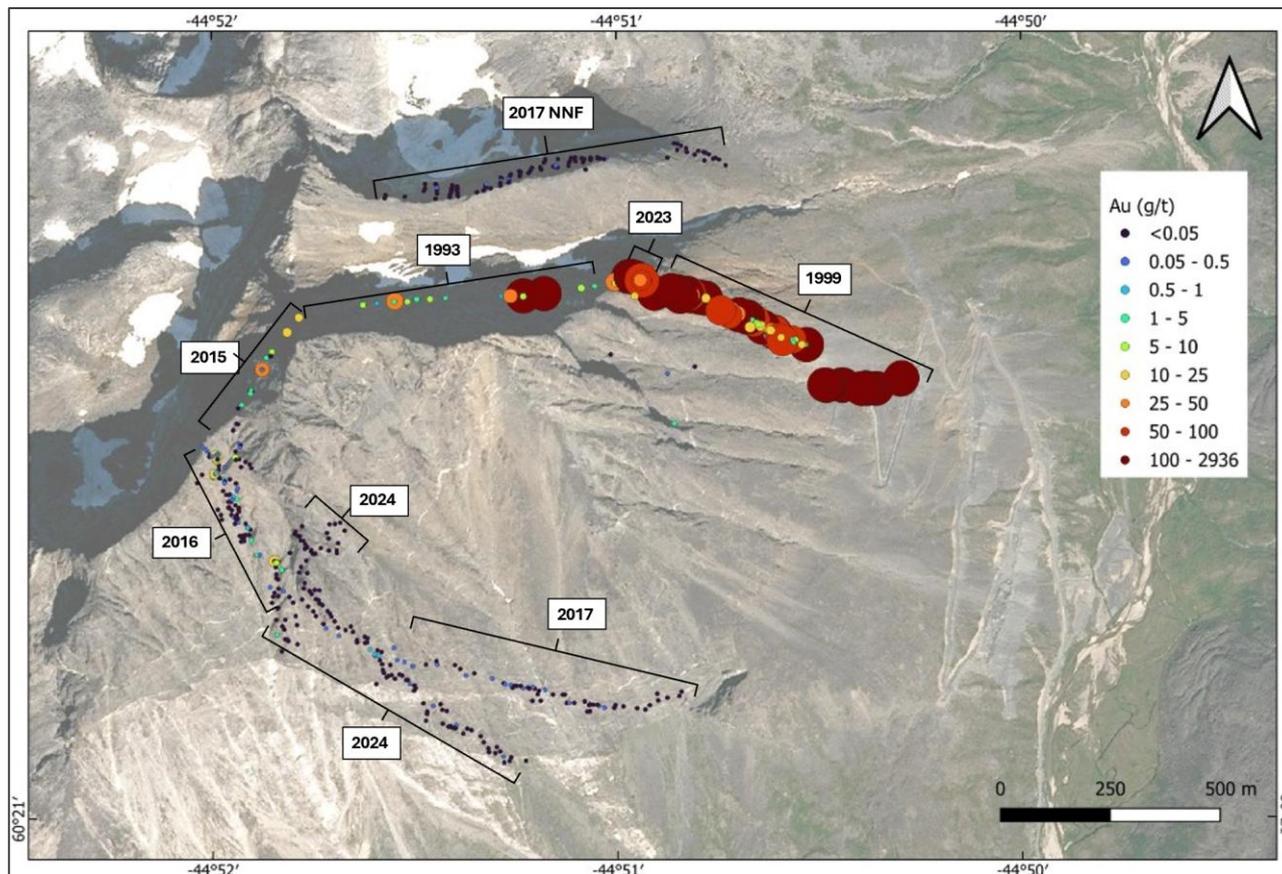


Source: Amaroq

The same mountaineering team was re-engaged in 2024 to increase sampling density on the southwest face, aiming to locate up-dip extensions of the high-grade Target Block ore shoot, and to collect samples of the 75 Vein where it was predicted to crop out based on the Leapfrog model. Results did not return significantly elevated gold grades from the lower part of the southwest face but may indicate that western extensions of the Target Block ore shoot swing to the north, thereby cropping out at higher elevations than previously expected.

Figure 9-3 shows the location of the various surface sampling programs described above.

Figure 9-3 Plan view of Nalunaq Mountain showing location of the surface sampling programs



Source: Amaroq

The placement of all these surface samples as well as the exact location and form of the Main Vein, and in some instances the 75 Vein, have been assisted by the collection of high-resolution drone imagery across most of the Nalunaq Mountain. This imagery has been collected over several campaigns and provides an ~10 cm level accuracy image and topography.

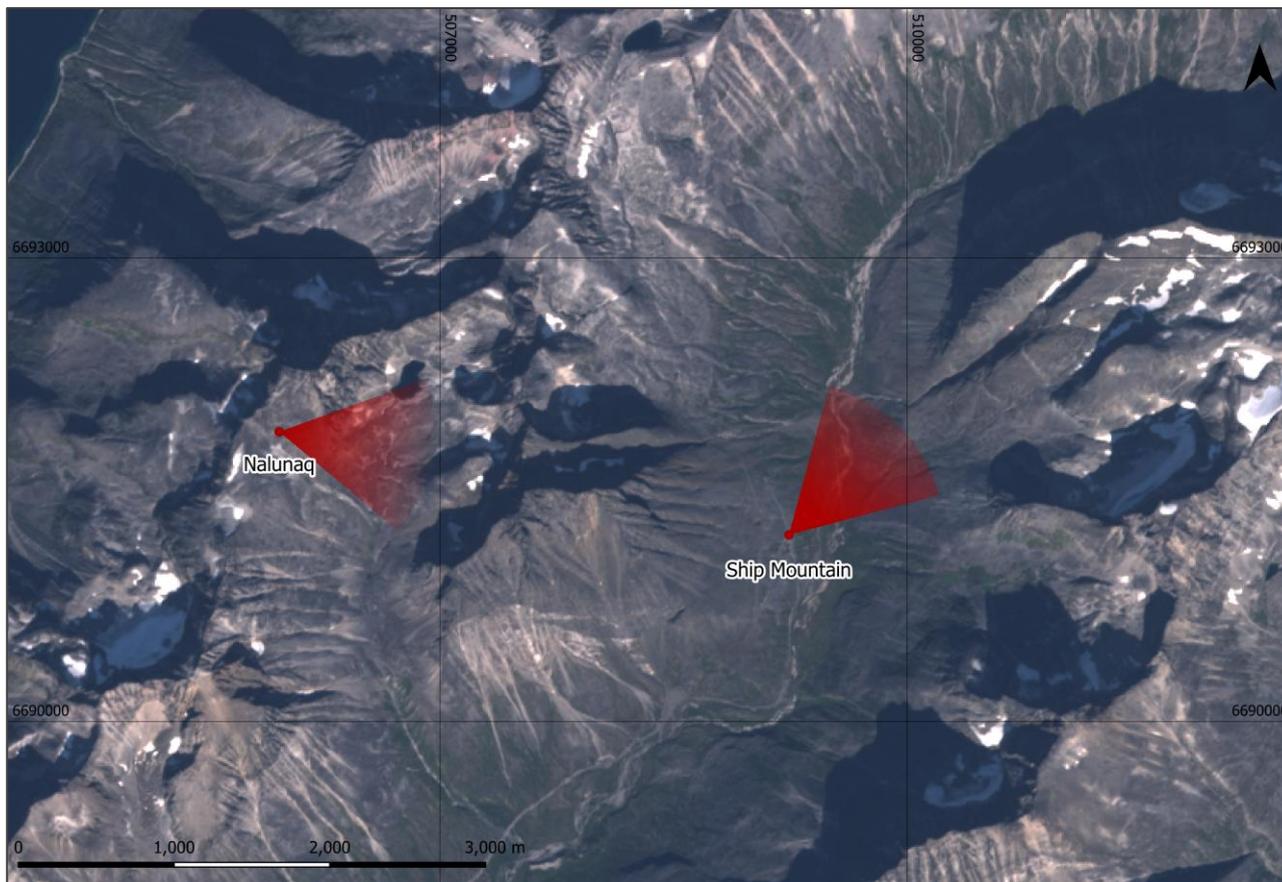
9.2.2 Hyperspectral Imaging

In 2021, TheiaX carried out hyperspectral scanning of two outcrops around Nalunaq: the west face of Nalunaq Mountain, and the southwestern face of Ship Mountain, directly northeast of Nalunaq in licence MEL 2006-10 (Figure 9-4).

Scans were made using a tripod-mounted AisaFENIX hyperspectral camera. The camera contains two sensors that combined cover the visible-near infrared (VNIR: 380-1000 nm) and short-wave infrared (SWIR: 970-2500 nm) regions of the electromagnetic spectrum at a spectral resolution of ~5 nm in the VNIR and ~12 nm in the SWIR (TheiaX 2021).

Alongside the scanning, detailed digital elevation models at ~1 m resolution were created using a Structure-from-Motion Multi-View Stereo (SfM-MVS) photogrammetry workflow and used to project the hyperspectral images into a 3D space.

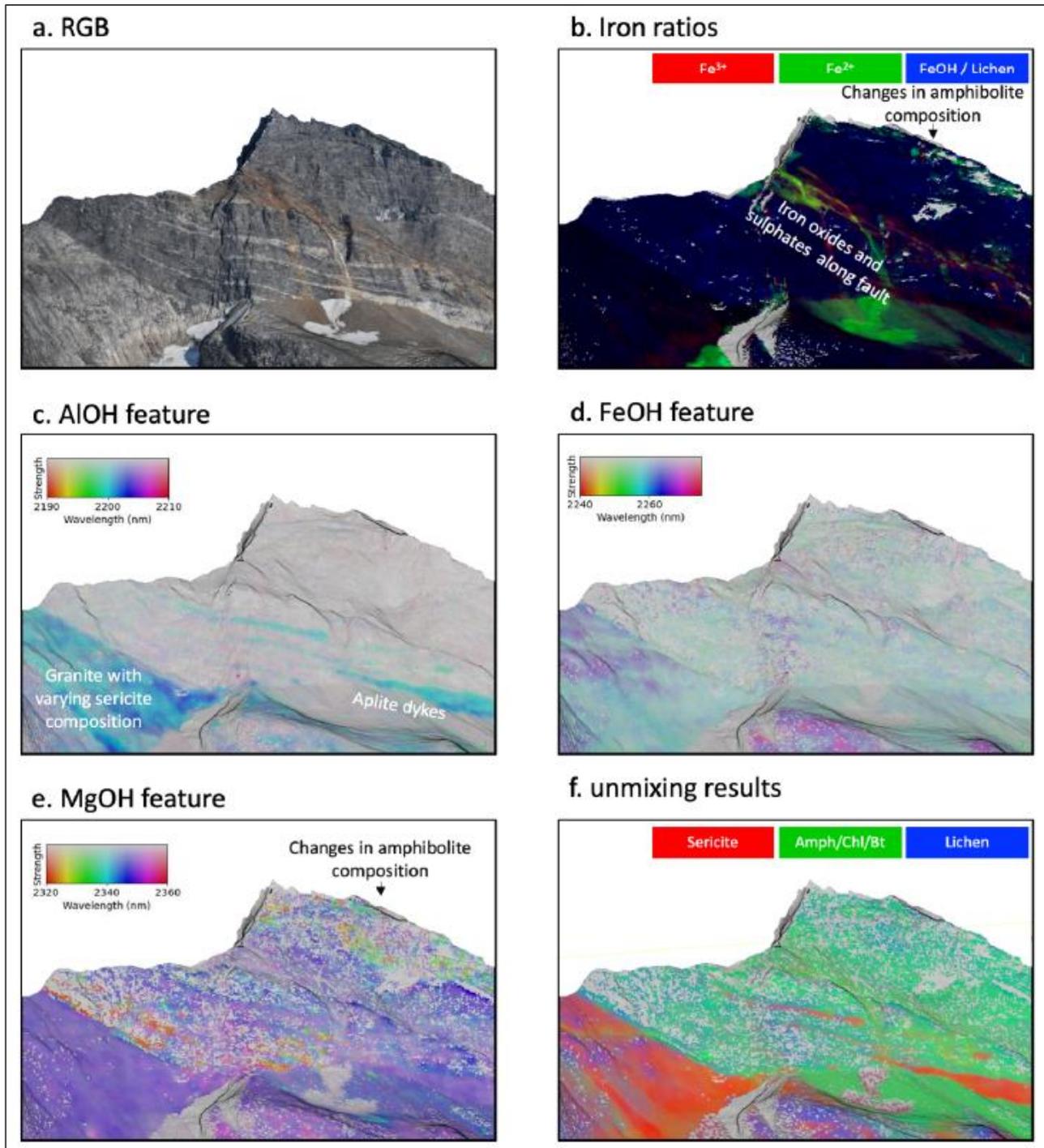
Figure 9-4 TheiaX hyperspectral scans at Nalunaq (Ship Mountain lies within the MEL 2006-10 licence)



Source: Amaroq

The hyperspectral scans of both Nalunaq and Ship Mountain highlight the presence of sericite alteration and its distribution in the aplite dykes and the granite as well as compositional changes in the amphibolite. This is especially clear on Nalunaq's west face, where ALOH feature shifts indicate alternating changes in the sericite, and FeOH and MgOH, along with an increase in iron oxide, may indicate compositional or textural changes in the amphibolite towards the top of the cliff. In addition, iron ratios clearly illustrate the presence of iron oxides (Fe³⁺) and iron sulphates (Fe²⁺) found along the Nalunaq Fault and in the scree below (Figure 9-5).

Figure 9-5 Hyperspectral scans of Nalunaq Mountain, west face



Source: TheiaX, 2021

10 DRILLING

10.1 Introduction

Sixteen surface drilling campaigns have been carried out at Nalunaq since 1993, both prior to and coincident with previous production, with drilling continuing during mining operations by Crew Gold, who carried out underground drilling between 2004 and 2008. Subsequent to the previous production period, Amaroq has completed drilling programs on the property every year since 2017. The aim of these drilling programs has been to better delineate the extents of mineralisation and build confidence in the geological and grade continuity through infill drilling to support MREs. The drilling campaigns are summarised in Table 10-1.

Table 10-1 Summary of drilling campaigns at the Nalunaq Project

Type	Year	Operator	No. of holes	Length of drillholes	% of total metres
Surface DDH	1993	NunaOil/Cyprus Greenland Corp.	13	2,975.4	4.2%
Surface DDH	1995	NunaOil	8	848.3	1.2%
Surface DDH	1998	NunaOil	37	5,131.7	7.2%
Surface DDH	1999	NunaOil	19	2,523.5	3.6%
Surface DDH	2001	NunaOil	13	2,740.6	3.9%
Subtotal	1993–2001	NunaOil/Cyprus Greenland Corp.	90	14,219.5	20.0%
Surface DDH	2004	Crew Gold	12	1,232.5	1.7%
Underground DDH	2004–2008	Crew Gold	237	5,572.0	7.8%
Surface DDH	2005	Crew Gold	56	11,255.5	15.8%
Surface DDH	2006	Crew Gold	15	3,770.5	5.3%
Subtotal	2004–2006	Crew Gold	308	21,830.5	30.7%
Surface DDH	2017	Amaroq	14	2,444.9	3.4%
Surface DDH	2018	Amaroq	18	3,831.7	5.4%
Surface DDH	2019	Amaroq	9	1,764.6	2.5%
Surface DDH	2020	Amaroq	10	2,041.1	2.9%
Surface DDH	2021	Amaroq	51	11,023.7	15.5%
Surface DDH	2022	Amaroq	45	8,978.7	12.6%
Surface DDH	2023	Amaroq	6	1,731.4	2.4%
Surface DDH	2024	Amaroq	11	2,985.8	4.2%
Underground DDH	2024	Amaroq	5	229.8	0.3%
Subtotal	2017–2024	Amaroq	169	35,031.7	49.3%
TOTAL	1993–2024	All companies	579	71,081.6	100.0%

10.2 Historical Surface Drilling Campaigns (1993 to 2006)

The first 13 holes (NQ1 to NQ13) were drilled in 1993 by Cyprus-Amax Minerals in joint venture with Nunaoil A/S (Guy, 1993). A total of 2,975 m was drilled from five pads. Drilling was contracted to Connors Drilling Ltd, Canada, using two Boyles Brothers 25A hydraulic drill rigs. Universal Helicopters Inc. of Newfoundland provided helicopter services.

The drilling aimed at testing the Main Vein below the surface sampling sites, discovered by NunaOil in 1992, in an attempt to extend the strike length of the Main Vein beneath the valley floor, where a possible structural zone may result in greater widths of the Main Vein. Cyprus was disappointed with the results and discontinued the program in October 1993.

In 1995, NunaOil drilled a further eight diamond drillholes (NQ14 to NQ21) from four pads, totalling 848.3 m. This drill program was carried out closer to the high-grade outcrop at the 425–445 masl than the 1993 drilling. The objective was to examine whether high-grade surface outcrops continued as sub-horizontal “panels” into the mountain. This drilling was contracted to Langley Drilling, Ontario, Canada, using a JKS Boyles 300 drill rig and BQ-core size. Helicopter services were provided by Greenlandair’s Hugh’s 500D helicopter on standby in Nanortalik.

Twenty-six samples were collected and sent to lab for assay. The results of this program were very encouraging. Seven intersections returned plus 2 g/t values and four of these returned higher values than 15 g/t. The maximum value was 113 g/t over 1.12 m. Two sections showed visible gold. Two mineralised horizons were identified. These were designated the Main Vein and the HWV, respectively. The distance between these two mineralised horizons was approximately 20 m. The cores were re-sampled by NunaOil in 1996, and 235 further samples were assayed.

In 1998, Nalunaq I/S drilled 37 diamond drillholes (NQ22 to NQ58) from 15 pads, totalling 5,131.7 m. A sum of 881 samples, including 83 field duplicates, were assayed. The drill program concentrated mainly on the Target Block between 400 masl and 600 masl. The drilling was conducted concurrently with development of the first underground adit of 280 m length at 400 masl. These drillholes were drilled partly to direct the adit along the 400 m level and to expand on mineralised structure. Ten holes were drilled in the Southern Block. Midwest Drilling, Manitoba, carried out the drilling with a Boyles 37A drill and BQ-size core, and helicopter support was provided by Greenlandair.

In 1999, 19 holes were drilled from 8 pads (NQ59 to NQ77) totalling 2,523.5 m. A total of 461 samples, including 45 field duplicates, were assayed. Drilling was carried out with BQ thin wall core size to achieve larger drill core samples, after recommendation by MRDI. The drill contractor was Midwest Drilling, using the Boyles 37A drill rig stored on site from the previous year, and with Greenlandair helicopter support.

The drilling was successful in extending the strike-length for 400 Level and also confirmed mineralised structure on other levels, above and below level 400 masl. Drilling in the Southern Block was particularly successful and revealed visible gold in three out of four drillholes.

No drilling was conducted in the year 2000, as the campaign was devoted to a large underground development program.

In 2001, 13 holes were drilled from 6 pads (NQ-78A to NQ-89), totalling 2,740 m. A total of 352 samples, including 35 field duplicates, were assayed. The objectives of this drill program were to expand the area of resources mainly in the Southern Block and to define the resource limits of the Target Block. A further goal of the drilling was to outline an additional area of at least 100,000 m².

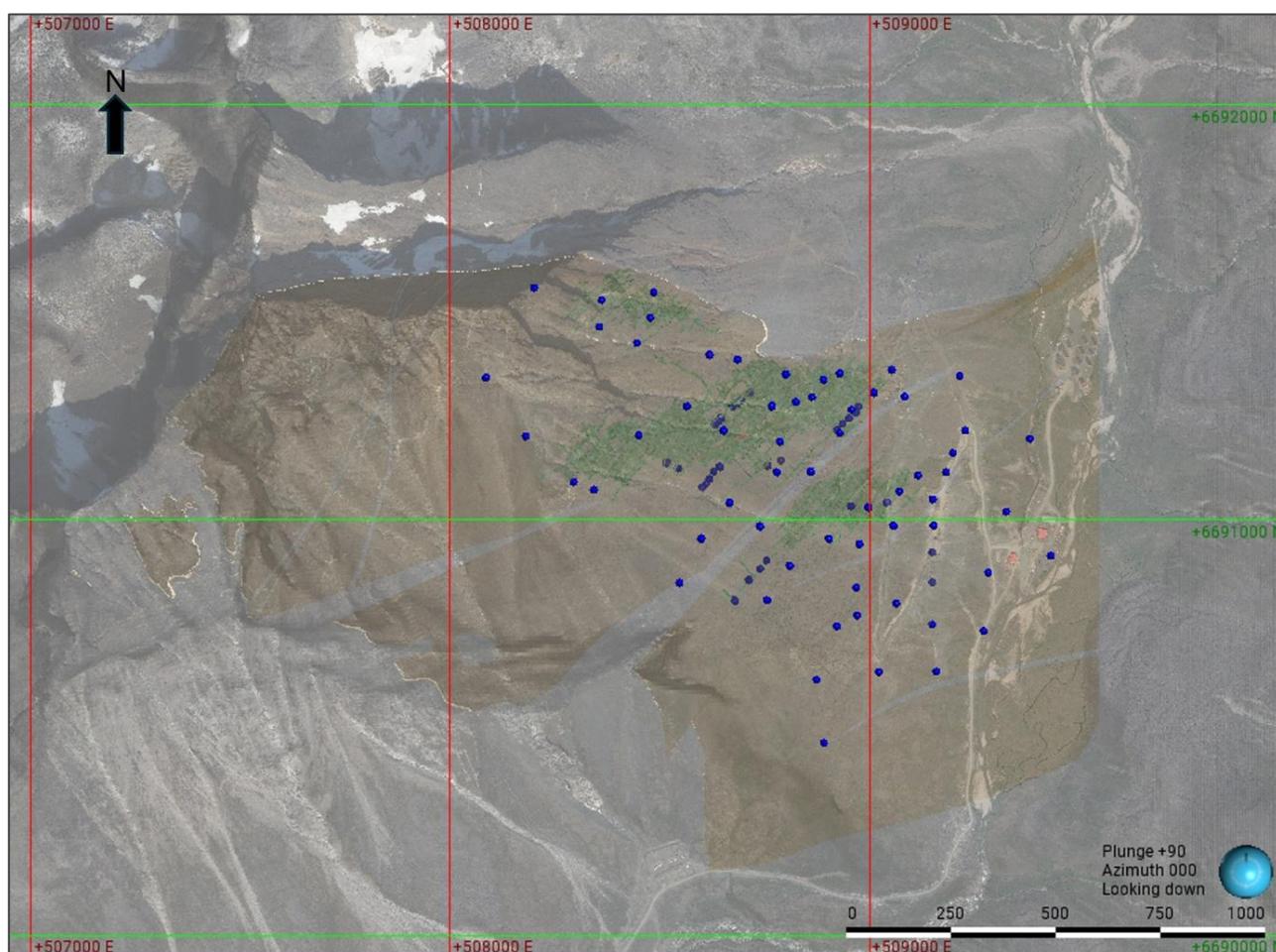
Drilling was completed by Midwest Drilling, using their Boyles 37A drill rig with BQ+ wireline. The drilling of the eight drillholes in the Southern Block showed good structural intercepts and visible gold was seen in two of the eight drillholes (NQ78B and NQ81). The four drillholes in the Target Block area did not clearly define the Main Vein structure beyond the existing adits. The drilling in the Southern Block provided the geological confidence for the drifting of a new adit at level 300 masl. The spacing between the drillholes was set to 100 m along strike and 150 m down dip. This, combined with two drillholes from each pad (45° and 85°), was considered a suitable density for the purpose of guiding the underground development.

In 2004, 12 holes were drilled from 5 pads (NQ91-NQ101), totalling 1,232.5 m. The objectives of this program were aimed at testing western extensions of mineralisation in Target Block and extensions of the outcropping Main Vein between 600 m and 820 m level. Five holes failed to reach target depth. Of the remaining seven, six holes intersected Main Vein and two of these intervals contained visible gold, the best of which returned 11.86 g/t Au over 0.15 m.

In 2005, 56 holes totalling 11,255.5 m were drilled from 20 pads using Nalunaq Gold Mine's two Boyles rigs and drillers hired from Canadian company Cyr Drilling. Helicopter support was provided by Air Greenland. Drilling targeted the Mountain Block and South Block areas. Main Vein was intersected in 43 holes, with the best results from holes in Mountain Block, including the highest-grade intersection to date (3,777 g/t Au over 80 cm). Drilling also demonstrated continuity of mineralisation through South Block, significantly extending the known extents of Main Vein.

In 2006, 15 holes totalling 3,770.5 m were drilled from 6 pads, mainly targeting extensions of the Mountain Block. Ten holes intersected Main Vein although none were considered of sufficiently interesting grade. Figure 10-1 shows the collar positions of all historical holes drilled between 1993 and 2006.

Figure 10-1 Collar positions of holes drilled during 1993–2006 overlain on aerial imagery and the extents of the 2025 modelled Main Vein (brown) and underground workings (green)



Source: Amaroq

10.3 Drilling by Amaroq Minerals (2017 to present)

Cartwright Drilling from Goosebay, Canada was contracted to drill in 2017 and 2018. They mobilised one CDI 500 helicopter (“heli”) portable wireline diamond drill rig in 2017 and two in 2018. During 2017, seven heli supported holes were drilled on Nalunaq Mountain totalling 895.74 m. For all remaining holes drilled, the rig was skid mounted with holes collared on the old Nalunaq mine road (Figure 10-2). In 2019, three holes were drilled with a Helios wireline diamond drill rig mobilised from Nuuk by Xploration Services Greenland A/S. All remaining holes were drilled with a Silver Bear A5 1,300 m wireline diamond drill rig mobilised from Nuuk by MT Højgaard A/S.

Figure 10-2 Skid-mounted rig drilling from the Nalunaq Mine road in 2017



Source: SRK ES, 2016

In 2020, drilling was undertaken using a Zinex A5 diamond drill rig leased from MT Højgaard in Nuuk, with Amaroq hiring a Canadian driller and local drilling assistants. All core was NQ in size. Holes were surveyed for dip and azimuth using a Reflex magnetic survey tool at 15 m intervals and most of the core was orientated using a Reflex ACT core orientation tool. A red mark was placed on the end of each run to indicate bottom of hole. Holes were generally straight with no excessive hole deviation. A total of 10 holes totalling 2,191 m were drilled from 5 pads. Drill pads were prepared using a Komatsu loader and a Hitachi excavator. Holes were designed to infill in the Valley Block area and to test for down dip extensions of the South Block.

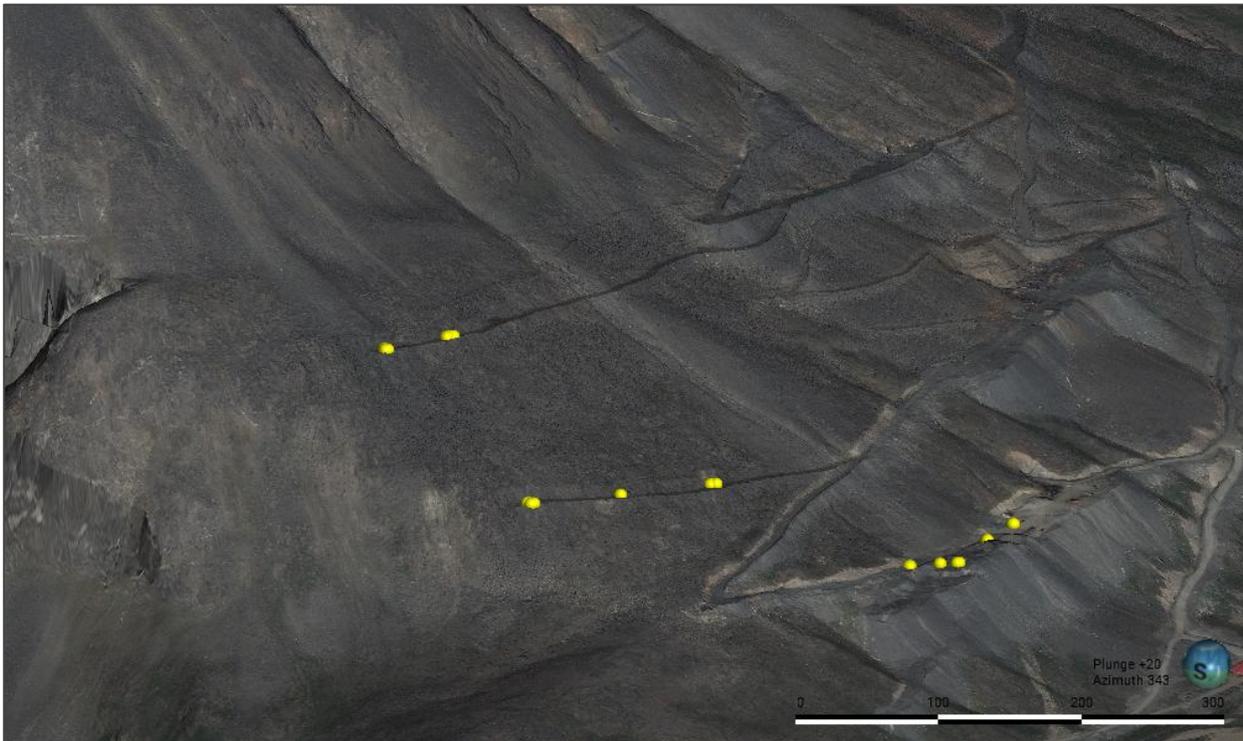
Over the course of the 2021 season, a total of 51 holes for 11,023.66 m of NQ core was drilled from 25 pads. A total of 49 holes reached target depth. Additional drillholes which were stopped, including:

- AEX21071, which was stopped at the end of the season with the drill rig still in place due to time constraints
- AEX21092, which was stopped short of Main Vein due to mechanical issues at the end of the season
- AEX21006, which was abandoned due to technical problems prior to reaching the modelled Main Vein depth.

A total of four drill rigs were in operation during the season. Initially, two Zinex A5 rigs from MT Højgaard were operated by Arndt Drilling. Later in the season, two additional rigs, a NW1500 and a track mounted Sondeq SS71 were sourced from International Peruminas Resources Ltd (IPR), who took over operation of all drill rigs. Both Zinex A5 rigs were mounted on steel skids to facilitate transport and alignment, and to prevent misalignment during drilling.

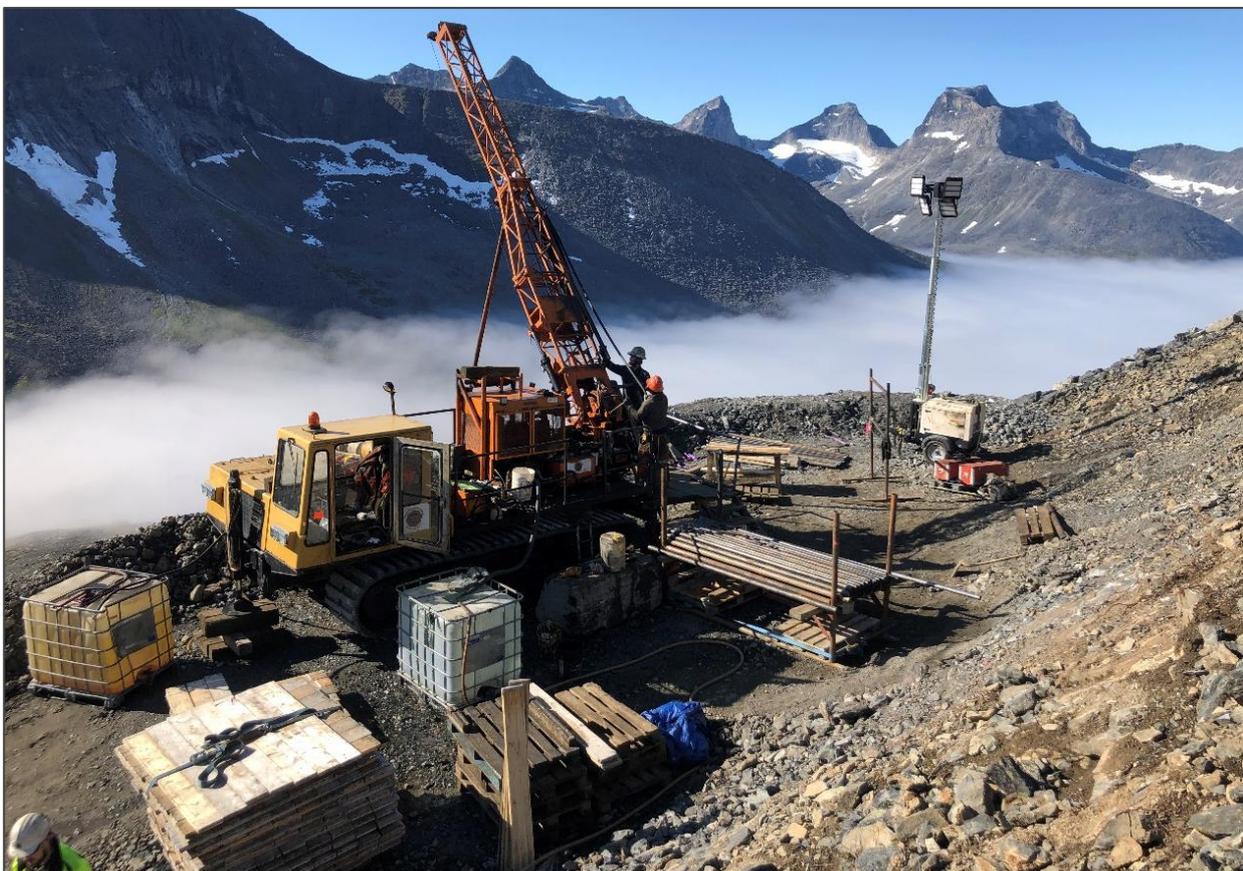
In the 2022 season, two new exploration roads were constructed to the southwest of the 350 and 400 level portals (Figure 10-3). Holes were designed to test for an up-dip continuation of the Valley Block. Drilling was also carried out from existing roads targeting lower levels of the Valley Block. A total of 8,878.7 m of NQ core was drilled in the 2022 season from 45 holes using two drill rigs, a NorthWest Drills 1500 and a Sondeq 33 (Figure 10-4), both operated by IPR.

Figure 10-3 Isometric view looking northwest showing the two new roads constructed on Nalunaq Mountain, with 2022 drillhole collars shown in yellow



Source: Amaroq

Figure 10-4 The Jameson rig (Sondeq 33) on the upper road in 2022



Source: Amaroq

For the 2023 and 2024 drilling seasons, wooden drilling pads were constructed at high elevations on Nalunaq Mountain to enable drilling into areas of the Main Vein up-dip of the Mountain Block and Target Block ore shoots.

In 2023, a total of 1,731.4 m of NQ drilling was completed in six holes using an NW1500 drill rig operated by IPR (Figure 10-5). The holes were successful in intersecting the Main Vein with grades up to 182 g/t Au over 0.69 m and also intersected the 75 Vein with intervals grading up to 256 g/t Au over 0.5m.

Figure 10-5 The upper drilling platform under construction by IPR in 2023

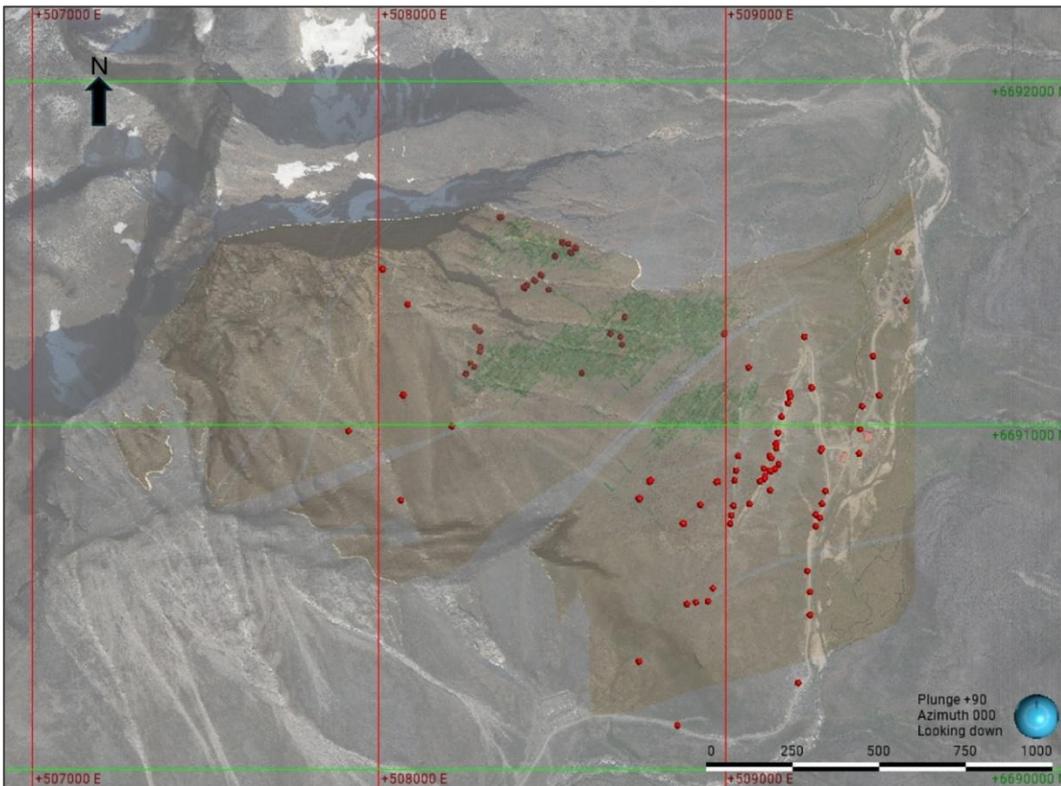


Source: Amaroq

In 2024, two drill rigs were operated by IPR; an NW750 and an NW1500, with a total of 2,985.8 m of NQ drilling in 11 holes testing for up-dip extensions of the Target Block ore shoot. A small amount of underground NQ core drilling was also carried out by mining contractor Thyssen Schachtbau using an ESD 9 drill rig, for grade control purposes and to inform short- and medium-term underground development. Holes were drilled upwards from drilling bays off the main haulage ramp in the footwall of the Mountain Block portion of the deposit.

Figure 10-6 below summarises the collar positions for drilling from 2007 to 2025.

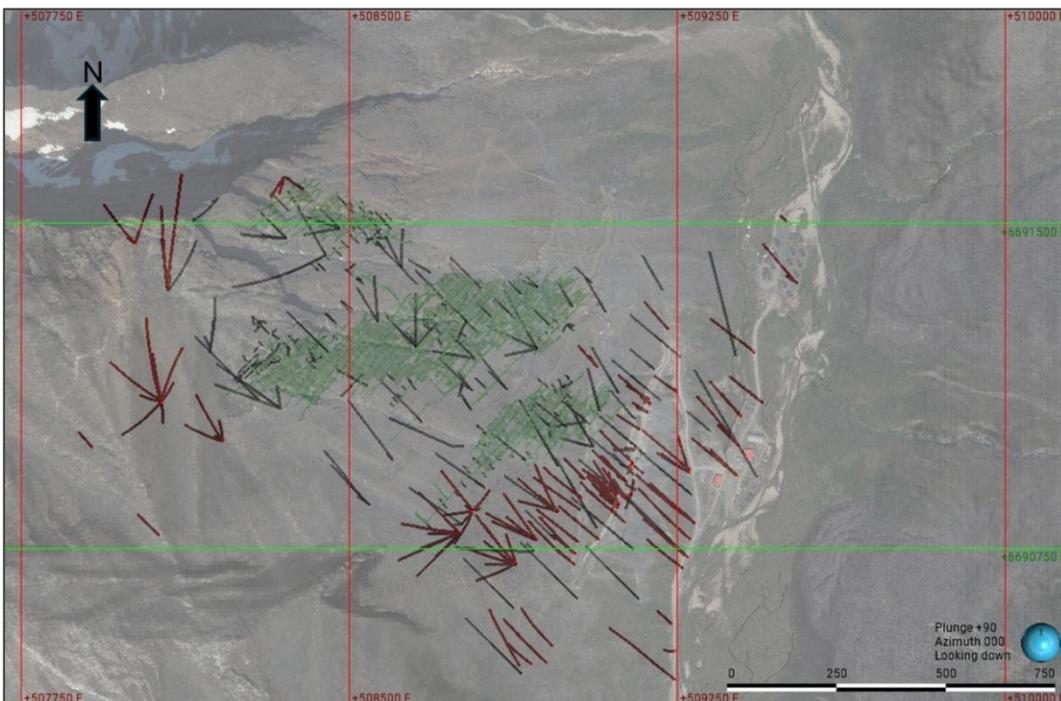
Figure 10-6 Collar positions of drilling between 2007 and 2025 overlain on aerial imagery and the extents of the 2025 modelled Main Vein (brown) and underground workings (green)



Source: Amaroq

Images showing the distribution of drilling pre-Amaroq campaigns (1993 to 2004) and Amaroq campaigns (2017 to 2024) are shown below.

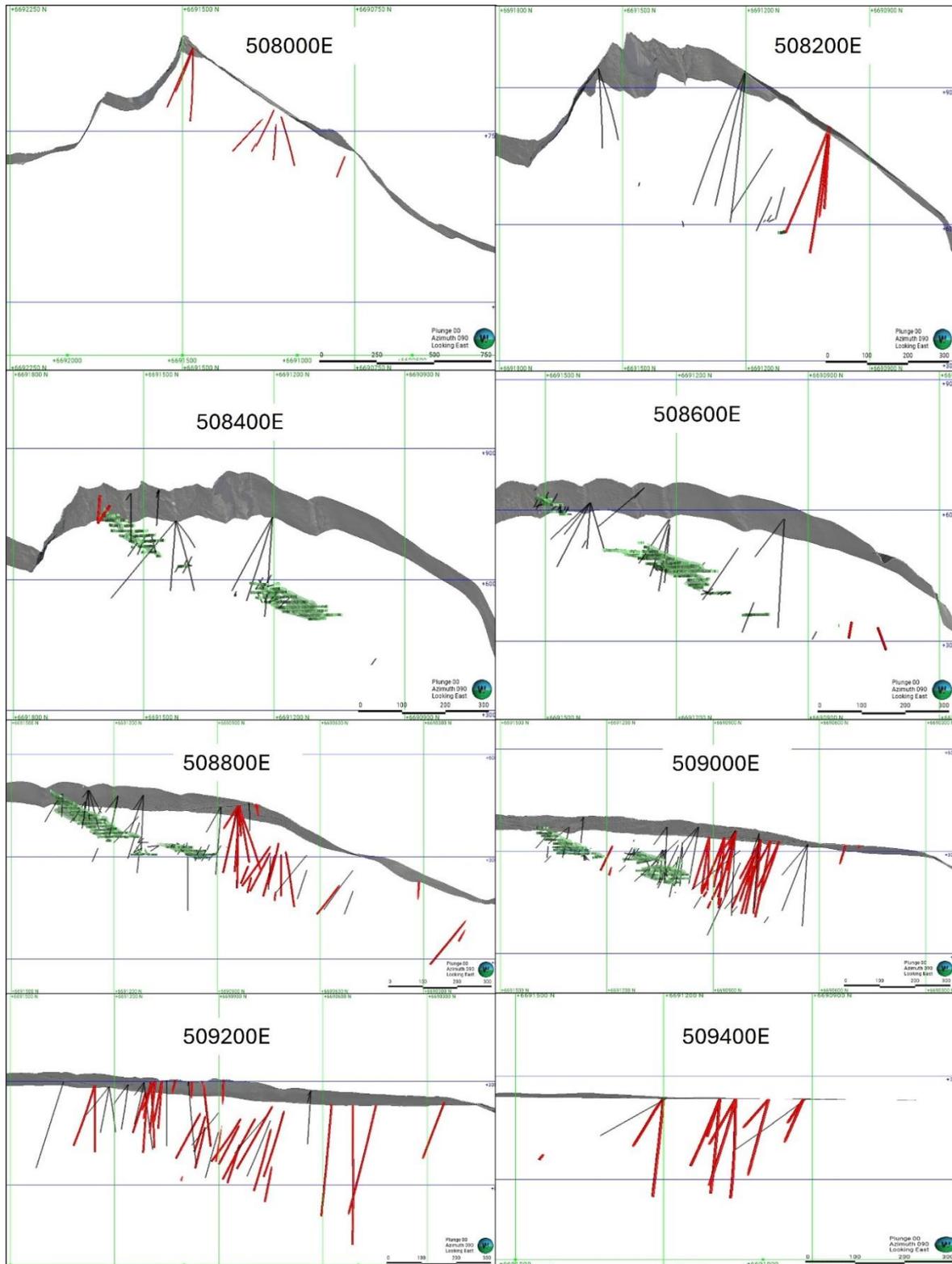
Figure 10-7 Plan view of drilling (red shows Amaroq holes post-2017 and black traces are drillholes 1993–2004 by other companies, green shading shows the underground development as of 23 February 2025)



Source: Amaroq

The drillholes by Amaroq and pre-Amaroq campaigns by easting are shown in Figure 10-8 at 200 m sections through the deposit from its eastern to westernmost extents.

Figure 10-8 Sections through Nalunaq deposit looking east of Amaroq (2017–2024) drillholes (red) and historical (1993–2004) drilling (grey) by other companies – green solids show underground development in context of topography (grey solid); all images looking east



Source: Amaroq

10.4 Collar Surveys

All historical drill collars (1993–2001) were accurately surveyed by the underground mining contractor’s surveyor in WGS 84 UTM Zone 23N (Schlatter, 2001). It is uncertain how collars were surveyed for surface holes drilled by Crew Gold in 2004–2006, although likely that it was by handheld GPS, with underground drillholes surveyed by the underground mine surveyor.

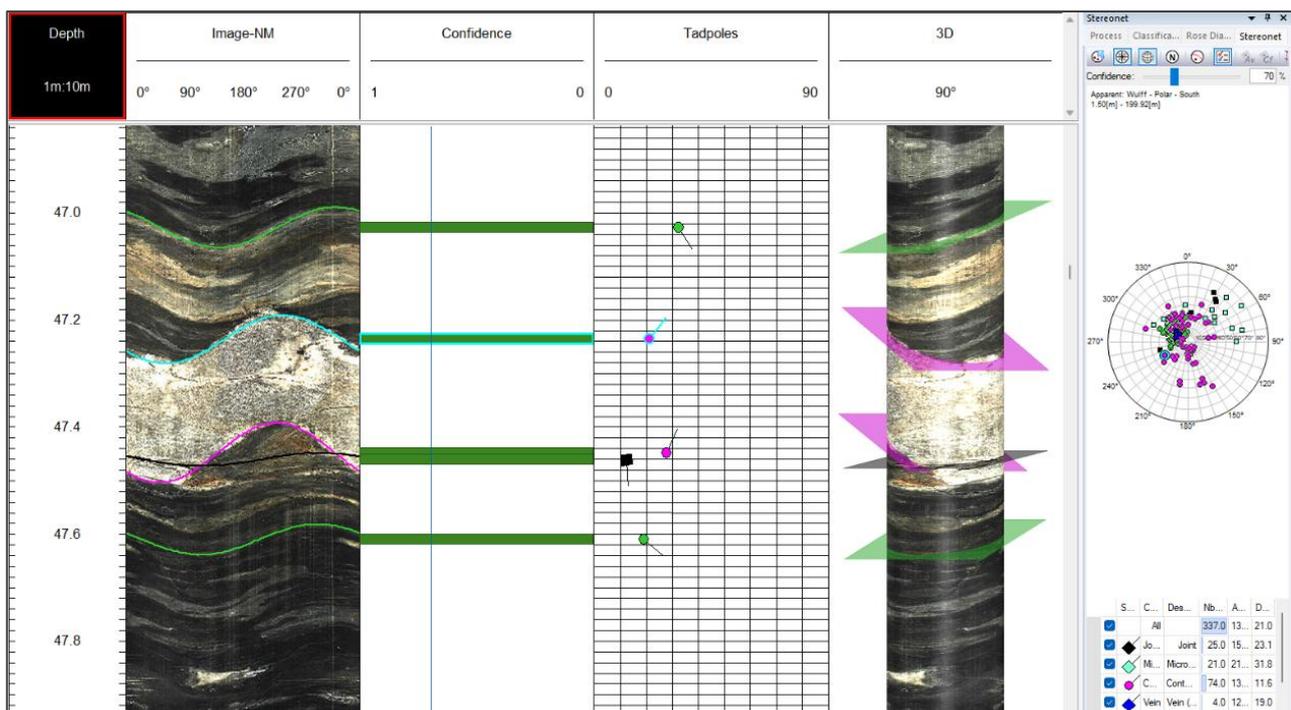
Holes drilled since 2017 have been positioned using Garmin 64S or 66i handheld GPS and aligned using Brunton compasses adjusted for magnetic declination. Upon completion of drilling, final collar locations were picked up using the same handheld GPS units. Underground collars were surveyed using a Leica MS60 total station.

10.5 Downhole Surveys

In historical drilling campaigns, azimuth was recorded at the collar only, using a tripod-mounted Brunton magnetic compass and corrected for magnetic declination. Dip was tested downhole using the acid-dip method, typically at the start of the hole, at anticipated Main Vein depth, and at the end of hole (Schlatter, 2001). The etching angle was recorded and converted to a true dip. Holes drilled by Crew Gold in 2005 and 2006 were surveyed using a Reflex survey tool with surveys taken approximately every 50 m.

In 2017–2021, downhole surveys were conducted using a Reflex EZ Trac magnetic survey tool at 15 m intervals. During 2018–2021, the core was orientated using a Reflex ACT III core orientation tool, with orientation marks placed at bottom of hole. In 2022 through 2024, drillholes were surveyed with an QL40-OBI-2G optical televiewer from Mount Sopris Instruments which captures a high resolution 360° image of the hole and replaces traditional core orientation and magnetic survey tools. The images are interpreted using WellCAD software (Figure 10-9) and structures are picked out for use in 3D modelling software. Future drilling campaigns will revert to use of traditional core orientation tools alongside the optical televiewer surveys. Underground drillholes were surveyed using a magnetic survey tool.

Figure 10-9 Structural logging from televiewer imagery in WellCAD



Source: Amaroq

A small number of holes could not be surveyed due to poor near-surface ground conditions and occasions when the televiewer was unable to pass the casing. Surveyed holes were generally straight with no excessive deviations recorded.

10.6 Core Logging

Core logging of historical drillholes (1993–2001) was undertaken graphically using standardised sheets (Figure 10-10) and then entered in the computer database. Information included rock type, grain size, alteration intensity and style, veining and mineralogy and sample intervals.

Figure 10-10 Example graphical core log from the 2001 drilling program

NALUNAQ									
DIAMOND DRILL LOG		drill pad # 2	drill hole # NA 80		logged by CA	date 6/7-2001			
Y UTM 690807	X UTM 508756.4	m asl 457.68	azimuth 305	dip -85°	1:200				
m	structure	grain size 0.5 2 8	from/to	sample #	CS w m s	alteration other	rock type and minerals	zone	
73									
50									
52									
54									
56									
58			173.70						
60									
62	bioband 60°C/A					some biotite banding	fgs volc.		
64				111247					LHW
66			169						
68									
70									
72			175.15						
74			1.34	111242		Hydrobrecc. wh. n	fgs volc		IHW
76			175.55						
78			0.51	111243	(0.21) chert	qtz schistite at 175.83 sand at 175.92	175.65 qtz-vein 175.83		MV
80						Polym. / chlorite	176.03 qtz vein		
82							176.26		
84			176.35						
86			0.6	111245			176.50 qtz-vein rusty 176.60		IHW
88							fgs volc		
90									
92	aplite v. silica		1.73				177.10 apite (few) 177.15		LFW
94				111246			Mgr. dolerite		
96			177.60						
98									
100									

Source: Schlatter, 2001

Crew appear to have logged in the same manner for the 2004–2006 drilling programs, using lithology codes such as “AMP-F” and “DO” for fine-grained amphibolite and dolerite respectively, and recording the alteration mineralogy. However, the original logging sheets are not available.

It is unknown whether geotechnical logging was carried out on cores prior to 2017, and it is lacking from the various historical databases possessed by Amaroq.

SRK ES established core logging and sampling procedures prior to the start of drilling in 2017. These same procedures were followed in subsequent programs by Amaroq geologists, with only minor changes. Core was removed from the inner tube by the drillers and placed in wooden core trays marked with the drillhole ID and tray number along with the start and end of each tray. Wooden depth markers were placed at the end of each drill run displaying the depth of the hole. During all field seasons, Amaroq geologists regularly conducted rod counts to ensure the depths were accurate. A covered core logging area was established at the Amaroq field camp. All core was laid out in the logging area on wooden core racks, then orientation lines and metre marks were drawn on the core. Any problems or discrepancies with the core were discussed with the drillers and corrected prior to logging commencing.

A basic geotechnical log was undertaken recording TCR, RQD, SCR, IRS, joint count and joint condition rating on a run-by-run basis. The core was then logged with separate continuous logs for lithology, mineralisation, and alteration with a separate discrete log created for structural data. During the 2018 program, a change was made to the way veining and mineralisation was logged with a separate log created for veining. All logging was into a Microsoft Excel logging template designed by SRK ES. All data relating to the borehole was recorded into the Microsoft Excel log, including all collar, survey, geological logging, and sampling data.

Late in the 2020 season, an MX Deposit database was implemented, with data being entered into the database directly. Once the geological log had been completed, areas thought likely to contain gold mineralisation were identified by the supervising geologist and marked up for sampling. A minimum sample length of 0.5 m was used to ensure there was enough material for the screen fire assay method which requires 1 kg of sample. The maximum sample length used was 1.5 m, with cut lines marked on the core 10° off the orientation line. All core was photographed both dry and wet prior to sampling. Periodically during the field season downhole data was entered into Leapfrog Geo 3D modelling software. The working model of the deposit was updated in order to better inform the upcoming drillholes and make adjustments as necessary.

In 2023, a custom database and core logging software was implemented, built using PostgreSQL, an open-source relational database. As part of this process, all historical data from the Nalunaq Project was validated and imported into this database, effectively ending the use of Microsoft Excel spreadsheets as the primary means of drillhole data storage. The logging templates and codes remaining the same as those used in previous years. Data was captured directly into the database during the 2023 and 2024 drilling campaigns.

10.7 Drilling Orientation Relative to Mineralisation

The drilling exhibits a range of inclinations, including upward drilling from underground. Consequently, the drill angles vary from approximately 88° upward to vertical downward. The azimuth also shows variability. The mineralisation generally dips at 38° towards the southeast, with drilling intersection angles typically ranging from 60° to 90°. Bara is therefore satisfied that overall drilling will represent the mineralisation adequately.

10.8 Drilling Summary

Bara is overall satisfied with the drill spacing and quality of the drilling programs carried out at Nalunaq in order to assess the mineralisation continuity and tenor and as inputs into an MRE.

The direction of drilling is optimal where possible to intersect the main orientation of mineralisation in order to support the interpretation of gold distribution within the vein. It is noted that access issues in areas of steep mountain slopes and high topography may influence sub-optimal drilling angles, but this is not seen to be significant or an issue at Nalunaq and is unavoidable as a result of the challenging topography of the Project area.

There are no known recovery factors or grade-recovery bias from drilling at Nalunaq.

Bara is satisfied that Amaroq's drilling procedures meet industry best practices, forming a solid basis for this MRE. However, there is less information on historical drilling before 2017, which poses risks in spatial accuracy and core recovery. These risks are somewhat mitigated by numerous close-spaced holes drilled between 2017 and 2024.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 Introduction

Sampling at the Nalunaq Project includes the following:

- Historical sampling prior to 2006 (surface rock sampling, channel sampling, drilling, and underground sampling)
- Underground sampling and drilling during historical mining operations
- Surface sampling between 2015 and 2024
- Drilling between 2017 and 2019
- Drilling in 2020
- Drilling between 2021 and 2024
- Underground sampling during current mining operations.

11.2 Historical Sampling

11.2.1 Sampling Methods

Historical sampling methods, assay and QAQC procedures are well summarised by Schlatter (2001) and Dominy and Sides (2005). It is understood that the procedures reported by Dominy and Sides in 2005 were followed for the remainder of the mining operation by Crew Gold, based on conversations between SRK ES and former Chief Geologist Kurt Christensen in 2016 (SRK Consulting, 2022). The procedures followed by Angel Mining once they took over operations are not well recorded, but the majority of historical sample data collected on the project was by Crew Gold and earlier operators, with samples collected by Angel Mining being constrained to the upper levels of Mountain Block and lower levels of South Block.

11.2.1.1 Exploration Sampling

Samples in the exploration adits in the 2000 and 2001 programs were collected by cutting across the Main Vein with a diamond channel saw and extending at least 10 cm into the wall rocks. If space allowed, then samples were also taken of the altered hangingwall and footwall. Three channels were cut and combined into one sample for assay. In raises, two chip samples were collected perpendicular to the vein and combined into one sample.

Drill core was sampled selectively and split with a manual core splitter, rather than a diamond blade core saw.

11.2.1.2 Production Sampling

Underground production grade control samples were collected by chipping from three parallel vertical lines, spaced at 1 m intervals in the “short” sidewall of the shanty-profile drives. A minimum sample length of 0.5 m was used. Each channel produces up to 1–2 kg of rock and once the three channels are combined, meaning that a 3–6 kg sample is effectively collected every 3 m along the drive.

11.2.2 Sample Preparation

11.2.2.1 Exploration Sampling

Each sample (c. 4 kg) was crushed to <3.4 mm and 1 kg split and pulverised to approximately <75 µm for screen fire assay (105 µm screen) at XRAL Laboratories, Canada. The entire oversize was assayed to extinction and a 50 g charge was taken of the undersize fraction for fire assay.

11.2.2.2 Production Sampling

A laboratory was established at the Nalunaq camp during the production phase. According to an inspection by Dominy and Sides (2005), the facility was well-maintained and operated efficiently under the supervision of a full-time chemist. The lab had the capacity to process around 30 samples daily and approximately 200 mine samples each month. Each channel sample, weighing 1–2 kg, underwent drying and was fully crushed to <10 mm before being pulverised so that >85% of the material passed through a 75 µm sieve.

11.2.3 Sample Assay Analysis

11.2.3.1 Exploration Samples

Samples from Crew Gold’s drilling programs in 2004–2006 and all underground drillholes were assayed at the onsite Nalunaq laboratory, with a subset of the 2005 drilling samples assayed by fire assay at ALS Chemex in Sweden. Chemex’s results were slightly higher, although not significantly, and this was assumed to be due to the fire assay method recovering more gold than the Nalunaq LeachWell method (Crew Gold, 2005).

11.2.3.2 Production Samples

Five-hundred grams of pulverised sample were scooped off for LeachWell bottle roll assay. Samples were rolled for 4.5 hours, after which the solution was left to stand for 15 hours prior to extraction of the gold by di-isobutyl ketone (DIBK) and atomic absorption spectroscopy (AAS) finish.

11.2.4 Quality Assurance and Quality Control

11.2.4.1 Exploration Sampling

A QAQC program was instigated by Strathcona and Crew Gold (Strathcona, 2001, 2002a, 2003; Schlatter, 2001). Four certified standards were inserted into the sample stream at a rate of 1 in 10, giving an average of two to five standards in each sample batch (Table 11-1).

Table 11-1 Details of reference materials used in QAQC of Crew Gold exploration samples

Standard	No. used	Certified grade value (g/t Au)	Accepted range: 2SD grade (g/t Au)	Laboratory mean grade (g/t Au)	No. outside accepted range
G06	21	14.7	13.4–16.0	14.0	9%
G397-8	18	11.7	10.2–13.1	11.4	11%
Ma-1b	29	17.0	15.4–18.6	17.1	7%
CDN-GS-8	22	33.5	31.8–35.2	33.1	9%

Source: Dominy and Sides, 2005

Note: SD – standard deviation.

The mean values determined by XRAL Laboratories for the four standards tend to be lower than the certified values, with occasional individual values falling outside and mainly below the accepted ranges. There was no pattern in the assay results of the various standards in individual batches to suggest a consistent bias in the assaying. In any individual batch, most results for standards were

acceptable. The differences between the mean values obtained by the laboratory compared to the certified values are generally small, and Dominy and Sides (2005) concluded that the results of the assaying are slightly low but acceptable with respect to accuracy. Assay precision was monitored by re-assaying 50 g duplicates of the <105 µm fraction. This was the same charge weight as for the original assay. Re-assaying was done for 74 samples, and precision was acceptable given the coarse gold-high-nugget nature of the mineralisation and was generally within ±15% (using Half Absolute Relative Difference, or “HARD”).

In addition to the pulp duplicates, reject re-splits were selected for duplicate assaying. The protocol required 1 duplicate for every 10 original samples. Samples were selected after original assaying to ensure a range of gold grades were tested, and only 14 samples were assayed. Despite this small number, the degree of scatter was small (within ±15% HARD) and the results indicated no bias.

An investigation into gold contamination during crushing and pulverising was undertaken and reported a gold loss of up to 1.6% in one case. All equipment was purged with 500 g of barren silica sand between each sample.

11.2.4.2 Production Sampling

Three CRMs, purchased from Gannet Holdings, were inserted into the sample batch at a rate of 1 in every 15 samples to check for accuracy, the results of which are summarised in Table 11-2.

Table 11-2 Summary of analysis of standards at the Nalunaq laboratory

Standard	No. of samples	Certified mean grade (g/t Au)	Laboratory mean grade (g/t Au)	No. samples breaching 1SD	No. samples breaching 2SD	Acceptable
ST08	78	0.33	0.32	5	0	Yes
ST06	109	1.10	1.16	26	0	Yes
ST18	98	9.70	9.57	2	0	Yes

Source: Dominy and Sides, 2005

Note: SD – standard deviation.

No standard values breached the two standard deviation (SD) level, which can be considered as the accepted range. Blank samples were not used routinely, though all blank results (n = 31) seen by Snowden in 2005 were below 0.03 g/t Au, with a single value of 0.07 g/t Au, indicating minimal contamination.

An inter-laboratory duplicate pulp sample of 50 g was retained at the rate of 1 in 10 and submitted to ALS Chemex (Sweden) for fire assay. Dominy and Sides (2005) determined that 76% of samples were within ±15% (HARD), which can be considered as showing a moderate variability. The quality of the pulveriser output was monitored once per week, with the aim of achieving +85% passing -75 µm.

One in 20 of the LeachWell residues were sent to ALS Chemex for fire assay. Dominy and Sides (2005) compared the primary LeachWell sample results and residue results and noted that residue grade was positively correlated to grade of the primary sample. This often reflects larger quantities of coarse gold in high-grade samples that are poorly dissolved by the cyanide. In general, the residue grades were below 2 g/t Au (90%). Based on 59 data points, the mean residue percentage is 3.5%, giving an overall gold recovery of 96.5% for the LeachWell method. Dominy considered this value to be reasonable in the presence of coarse gold.

Laboratory duplicates were not routinely taken during the previous mining operation at Nalunaq, although Dominy determined from 18 sample pairs that 66% of samples were within 15% (HARD). This shows high variability but is common in this style of mineralisation where pulverisation is often not as effective at homogenising the sample due to the malleability of gold.

11.2.5 Chain of Custody and Sample Security

Samples shipped by Strathcona during the underground exploration phase were placed into plastic pails with tamper-evident seals. During subsequent exploration and production sampling, samples were taken directly to the Nalunaq laboratory by the geologist or geotechnician. This included drill core being submitted to the Nalunaq laboratory.

11.3 Surface Sampling – 2015 to 2024

11.3.1 Surface Sampling Methods

In 2015, 2016, 2017 and 2024, sampling of the Main Vein was conducted by a team of professional mountaineers. All sampling required rope access with abseil descents and helicopter support. Abseil descents were monitored by two geologist spotters on an opposite mountain who guided the mountaineers via VHF radio to the Main Vein location.

Samples were collected by hammer and chisel and typically weighed between 1 kg and 3 kg. Sample locations were recorded by Garmin handheld GPS units. Main Vein width, strike and dip and basic lithological information was recorded. Samples were placed into cotton sample bags with a numbered sample tag and sent to ALS Loughrea, Ireland for analysis.

In 2022, a 10 m section of Main Vein was exposed by Amaroq geologists by removing scree cover at approximately 820 masl. The full thickness of the vein was sampled every metre with a diamond blade rock saw, with sample lines parallel to the Main Vein and samples extended by approximately 5–10 cm into the wall rock on both sides. In total, nine channel samples were collected. Samples were approximately 3–6 kg each.

11.3.2 Sample Preparation

All samples taken during surface sampling in 2015, 2016 and 2017 were dispatched by air freight from Nanortalik to ALS Geochemistry in Loughrea, Ireland, for preparation and analysis. Surface samples collected in 2022 and 2024 were prepared at ALS Geochemistry's containerised preparation laboratory onsite at Nalunaq, before being packaged and sent to ALS Geochemistry in Loughrea, Ireland, for analysis. Sample preparation in all years used ALS code PREP-31BY which comprises crushing to 70% passing 2 mm, rotary splitting off 1 kg and pulverising the split to 85% passing 75 µm.

11.3.3 Sample Assay Analysis

Samples were assayed at ALS Loughrea by screen metallics fire assay method Au-SCR24 which has a detection limit of 0.05 ppm Au. This involves screening 1 kg of pulverised sample to 106 µm followed by a gravimetric assay of the entire plus fraction and a duplicate 50 g AAS assay of the minus fraction.

Samples were also assayed for trace elements in order to identify pathfinder elements and assess whether the sampled material was from a mineralised structure in the event of low gold grades. The 2015 samples were analysed for 35 elements using ALS method ME-ICP41 which involves aqua regia digestion and analysis by inductively coupled plasma-atomic emission spectroscopy (ICP-AES). The 2016 samples were analysed for 33 elements using ALS method ME-ICP61 which involves four-acid digestion followed by analysis by ICP-AES. The 2017 samples were analysed for gold only. The 2024 samples were once again analysed for 34 elements using ALS method ME-ICP61 and for silicon, titanium and zirconium by portable x-ray fluorescence (XRF) method pXRF-34.

11.3.4 Quality Assurance and Quality Control

11.3.4.1 2015 and 2016 samples

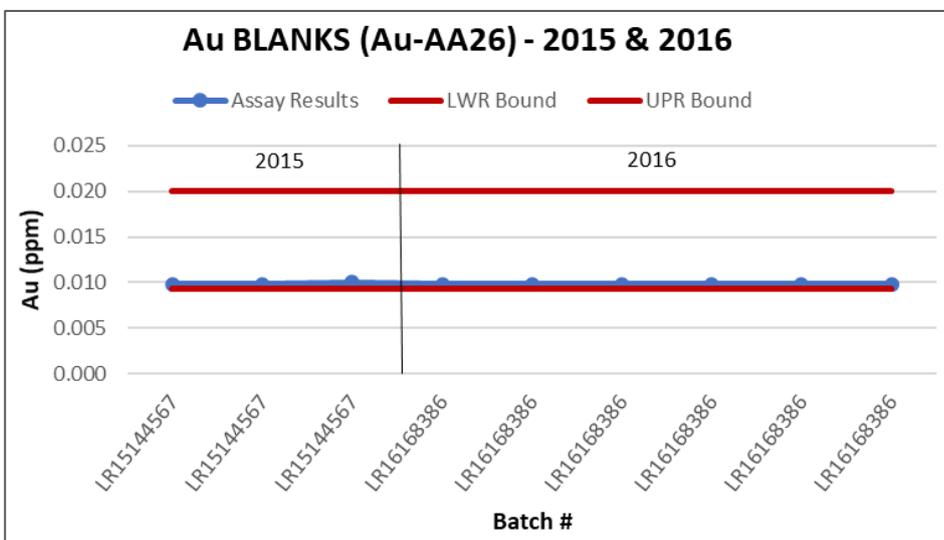
The QAQC program included insertion of CRMs, coarse blanks, and coarse reject duplicates.

Blank Samples

A porphyritic quartz, feldspar biotite granite “Rapakivi Granite” was used as coarse blank material, locally sourced. Coarse blank samples of 2–3 kg each were included in all batches.

The blanks performed well with no indications of contamination for the ALS Au-AA26 method in the 2015–2016 sampling (Figure 11-1).

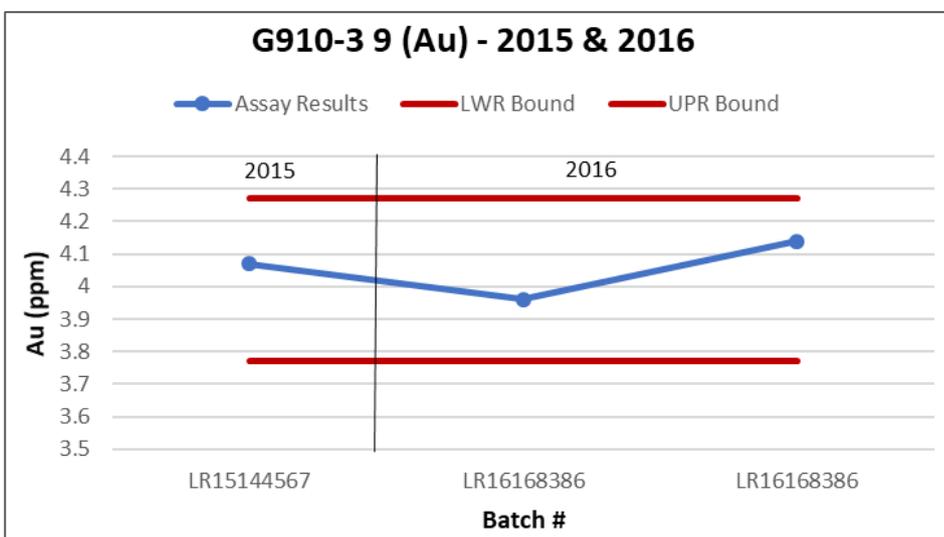
Figure 11-1 Au-AA26 blanks results for 2015 and 2016



Source: SRK ES, 2020

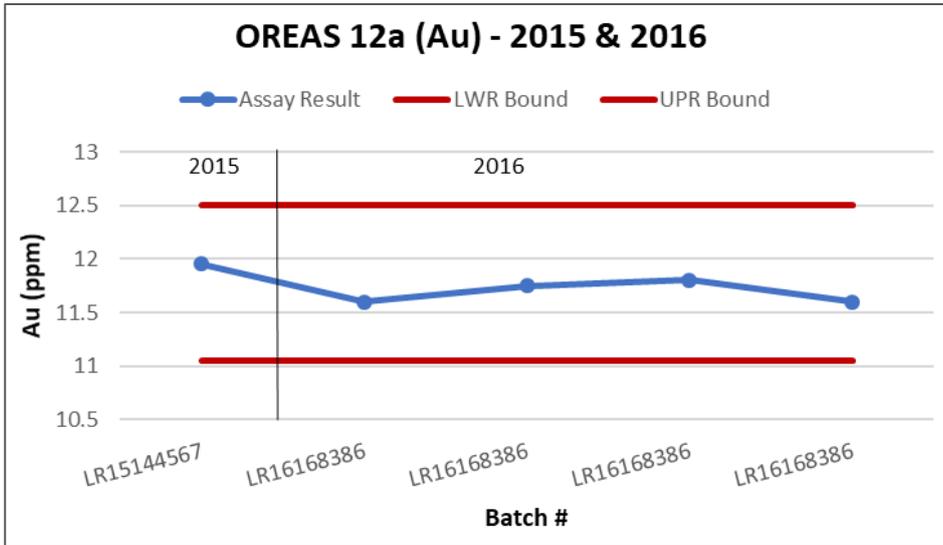
Standards used in the 2015 and 2016 included G910-3 9 and OREAS 12a. Assay results for these are presented in Figure 11-2 and Figure 11-3, respectively. The assay results for both standards are within the accepted limits.

Figure 11-2 Assay results for standard G910-3 9 for 2015 and 2016



Source: SRK ES, 2020

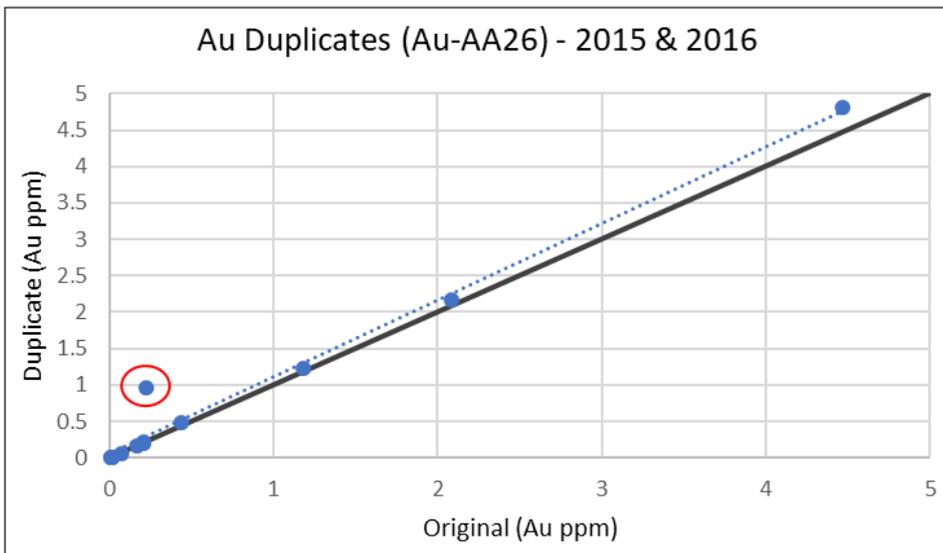
Figure 11-3 Assay results for standard OREAS 12a for 2015 and 2016



Source: SRK ES, 2020

Gold assay results for coarse duplicate samples and their corresponding original samples analysed by the ALS Au-AA26 method in 2015 and 2016 are plotted in Figure 11-4. The circled sample, 14463 from batch LR16168386, showed a slight difference in the original and duplicate gold values, otherwise good repeatability is observed from the rest of the results.

Figure 11-4 Gold assay results for coarse duplicate samples and their original samples for 2015 and 2016 (analysis by Au-AA26)



Source: SRK ES, 2020

11.3.5 Chain of Custody and Sample Security

The 2015 surface samples were held in bags sealed with cable-ties in a secure storage facility in Nanortalik prior to be collected by a shipping company for air freight to Ireland. A list of samples was provided to the receiving ALS laboratory and ALS confirmed that all samples were received and that there was no evidence of tampering. The 2016 and 2017 samples were placed in their individual sample bags into larger bags for shipment. These large bags were sealed with cable-ties marked with unique ID numbers and held in a secure storage facility in Nanortalik until collected by a shipping company for air freight to the ALS laboratory in Ireland via Narsarsuaq. In 2022 and 2024, samples were delivered to the

Nalunaq preparation laboratory by the senior geologist. Once prepared, sample pulps were packaged in boxes by ALS and delivered to the shipping agent at Narsarsuaq airport by Amaroq employees.

11.4 Drilling – 2017 to 2019

11.4.1 Sampling Methods

All core was sampled as half-core (or quarter-core field duplicates) cut with a diamond bladed core saw. Cores were selectively sampled. Where a bottom of hole orientation line was present, the cut line was marked approximately 5° off axis to ensure preservation of the orientation line. The right-hand side of the core (when looking downhole) was always sampled. Sample IDs were marked on the core prior to core photography. All samples were placed into calico sample bags marked on the outside with the sample ID and a ticket with the same sample ID was placed into the sample bag and into the core box where the sample was taken from. All sampling was supervised by the senior geologist. Samples were sent to ALS Loughrea, Ireland for preparation and analysis.

11.4.2 Sample Preparation

ALS sample preparation method PREP-31BY was used on all samples. This involves crushing to 70% less than 2 mm, rotary split off 1 kg, and pulverising the split to better than 85% passing 75 µm.

11.4.3 Sample Assay Analysis

In 2017 and 2018, all samples were analysed by ALS screen metallics fire assay method Au-SCR24 which has a detection limit of 0.05 ppm. This involves screening 1 kg of pulverised sample to 106 µm followed by a gravimetric assay of the entire plus fraction and a duplicate 50 g AAS assay of the minus fraction.

In 2019, all samples were analysed by 50 g fire assay technique Au-AA26 with AAS finish, which has a detection limit of 0.01 ppm Au and an upper detection limit of 100 ppm Au. Only those samples containing visible gold and samples considered to be the Main Vein were assayed with screen-metallics fire assay technique Au-SCR24 which has a detection limit of 0.05 ppm Au.

No multi-elemental trace element analysis was carried out on the 2017–2019 drill core samples.

11.4.4 Quality Assurance and Quality Control

QAQC procedures in 2017–2019 included insertion of coarse blanks, CRMs and quarter-core field duplicates (2017–2018 only). The insertion rates and number of samples are summarised in Table 11-3.

Three different CRMs from Geostats Pty Ltd were used throughout the 2017–2019 drilling programs, selected with a range of grades to match those expected at Nalunaq. All three CRMs are described as being high grade, low sulphide ore and are certified for both 50 g fire assay and aqua regia techniques. The certified values for the three CRMs as measured by 50 g fire assay are provided in Table 11-4.

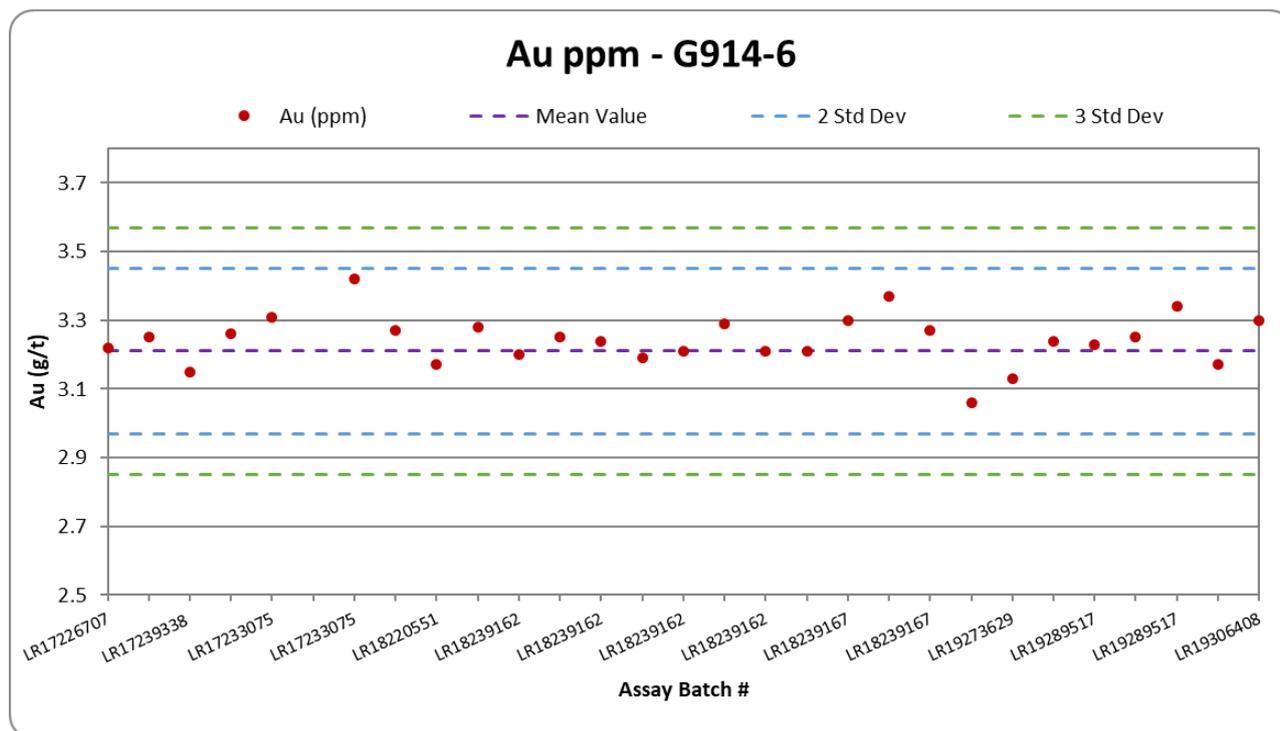
Table 11-4 CRMs used in the 2017–2019 drilling programs

CRM	Certified mean grade (g/t Au)	SD (g/t Au)	Based on # results
G914-6	3.21	0.12	179
G914-7	9.81	0.43	178
G916-5	19.92	0.69	175

CRMs were submitted as 50 g plastic sachets and were only assayed with the ALS fire assay method Au-AA26. A total of 92 CRMs were submitted with an insertion rate of 4.6% split between the three different types (Table 11.3).

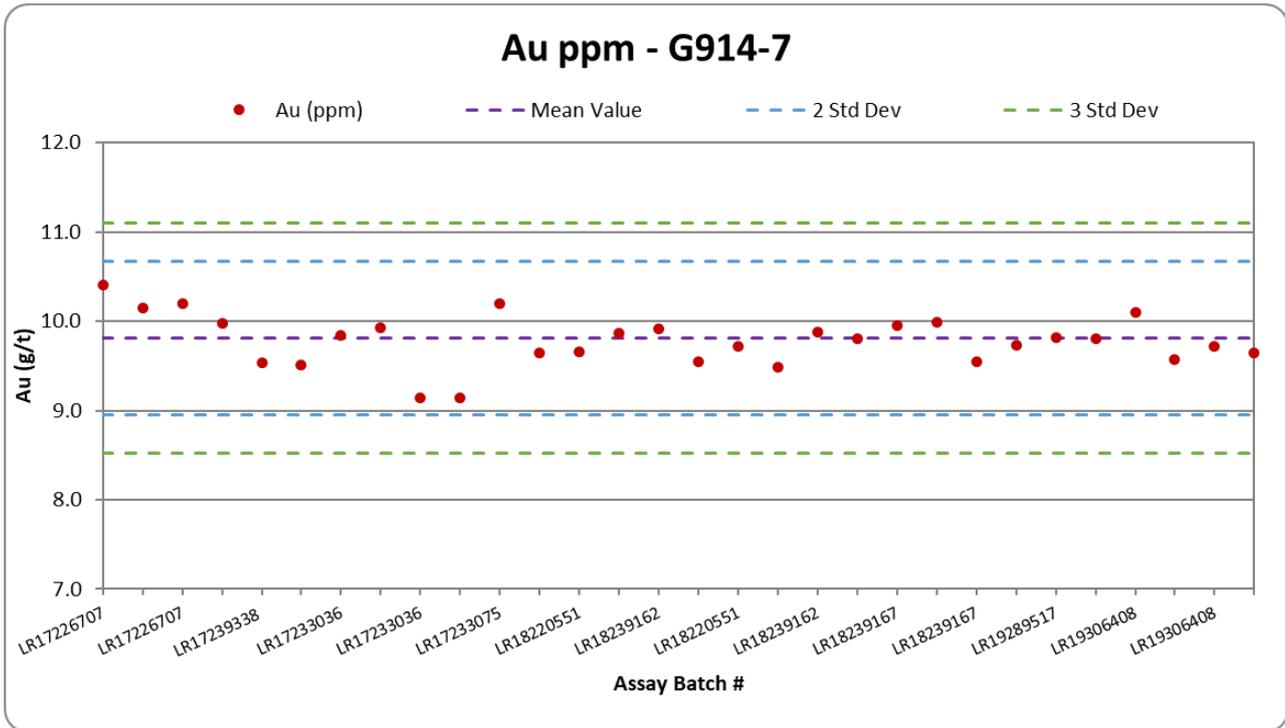
All three of the CRMs performed well, with all results falling within the ± 2 SD of the certified mean. The results show a very minor positive bias in the lower grade CRM (G914-6 – 3.21 g/t Au) and a minor negative bias with the high-grade CRM (G915-6 – 19.92 g/t Au). However, this is not material, and the calibration and accuracy of the analytical equipment can be seen to be suitable for the grade ranges expected of the samples submitted. Graphs showing the results of the three CRMs by batch over time are shown below in Figure 11-6 to Figure 11-8.

Figure 11-6 Results for gold in G914-6 by laboratory batch



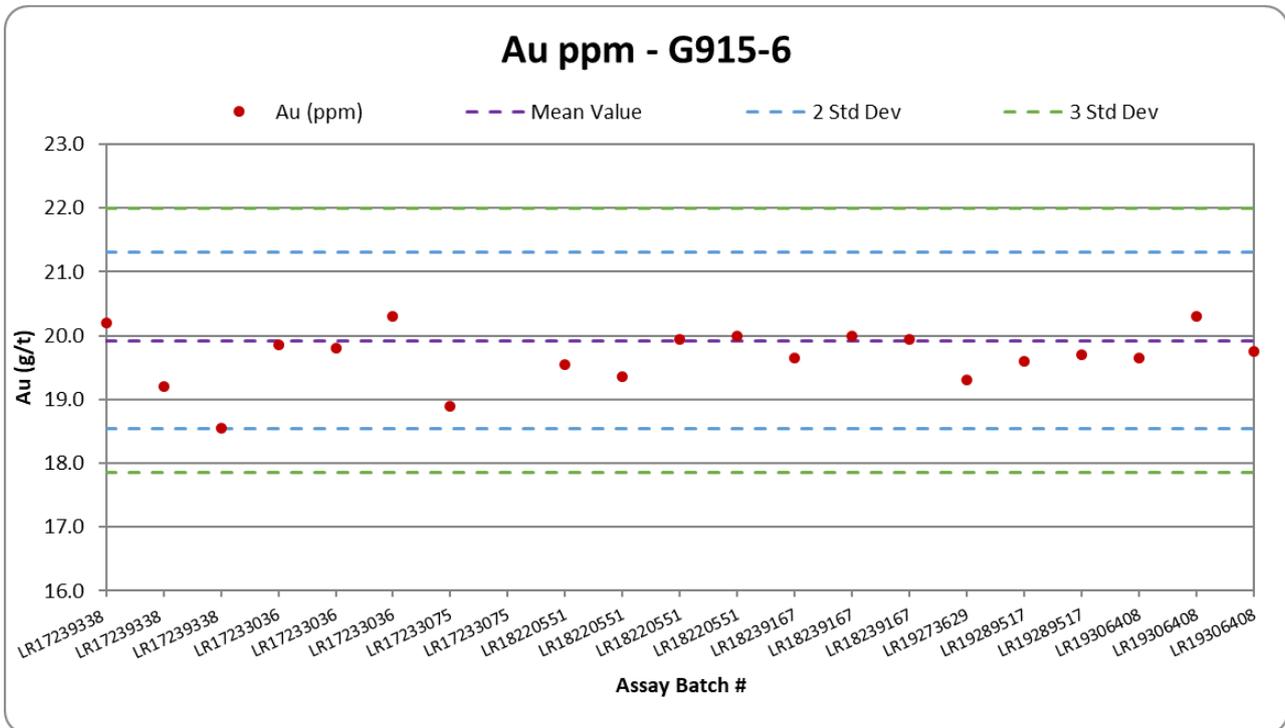
Source: SRK ES, 2020

Figure 11-7 Results for gold in G914-7 by laboratory batch



Source: SRK ES, 2020

Figure 11-8 Results for gold in G915-6 by laboratory batch



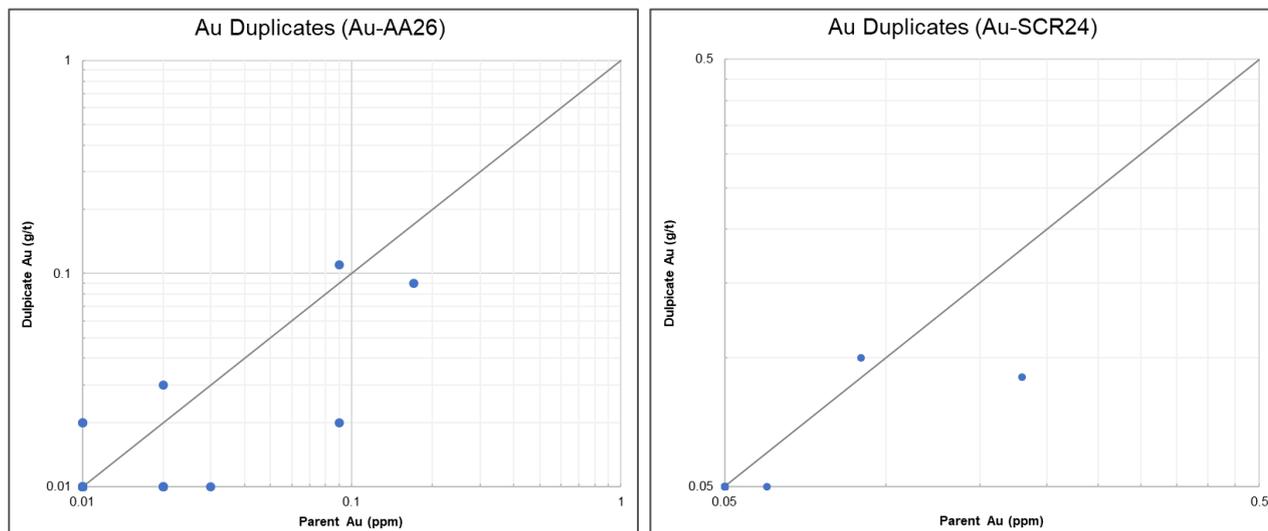
Source: SRK ES, 2020

11.4.4.2 Field Duplicates

Field duplicates were taken at the core sampling stage by cutting a quarter core from the retained half core. The purpose of quarter-core duplicates is to assess how repeatable the sampling was and therefore the suitability of the sampling method given the mineralisation style.

A total of 58 field duplicates were taken from the 2017–2018 programs, with none taken during the recent 2019 drilling program. Of these samples, only a minority returned grades above the LOD for either analytical method (Figure 11-9). The insertion rate of the total program is 2.9%, reflecting the lack of sample collection in 2019.

Figure 11-9 Comparison of field duplicate results by analytical method



Source: SRK ES, 2020

The lack of results above the LOD due to the mineralisation style at Nalunaq, together with the mineralisation's high variability (nugget effect) and relatively small size of the samples, makes it hard to draw any meaningful conclusions from these results. It does highlight the issues relating to drill core sampling within this type of mineralisation. Even though the results show a poor repeatability in terms of absolute values, generally samples of moderate grade (>5x LOD) show a relationship. The decision to not collect field duplicates in 2019 was made because of the issue described above.

11.4.5 Chain of Custody and Sample Security

Sample security for the 2017–2019 drill core samples was the same as for the surface samples described in Section 11.3.5. Samples were delivered by Amaroq personnel via charter boat to DHL in Narsarsuaq, who then organised transportation to the laboratory.

11.5 Drilling – 2020

11.5.1 Sampling Methods

All core was sampled as half core and cut with a diamond bladed core saw. Where a bottom of hole orientation line was present, the cut line was marked approximately 5° off axis to ensure preservation of the orientation line. The right-hand side of the core (when looking downhole) was always sampled. Sample IDs were marked on the core prior to core photography. All samples were placed into calico sample bags marked on the outside with the sample ID and a ticket with the same sample ID was placed into the sample bag and into the core box where the sample was taken from. All sampling was supervised by the senior geologist. Samples were submitted to SGS Sudbury, Ontario, Canada for preparation and analysis.

11.5.2 Sample Preparation

SGS sample preparation method PRP94 was applied to all samples, with the addition of a rotary split. This involves crushing to 75% passing 2 mm, a rotary split to 1 kg, and pulverising the 1 kg subsample split to better than 85% passing 75 µm.

11.5.3 Sample Assay Analysis

Samples tested were analysed by 50 g fire assay with ICP-AES finish (GE_FAI50V5), which has a detection limit of 0.001 ppm (1 ppb) Au. Samples containing visible gold and samples considered to be the Main Vein were assayed with screen-metallics fire assay (GO FAS50M) which has a detection limit of 0.01 ppm Au. This involves screening 1 kg of pulverised sample to 106 µm followed by 50 g fire assay of the entire plus fraction and duplicate analysis of the minus fraction. In addition, all samples were assayed with a four-acid digestion/33-element ICP-AES (GE_ICP40Q12).

11.5.4 Quality Assurance and Quality Control

A total of 85 QAQC samples were submitted during the 2020 drilling program, an overall insertion rate of 5.8%. A summary is provided in Table 11-5. No field duplicates were submitted following the decision made in 2019 for reasons described previously.

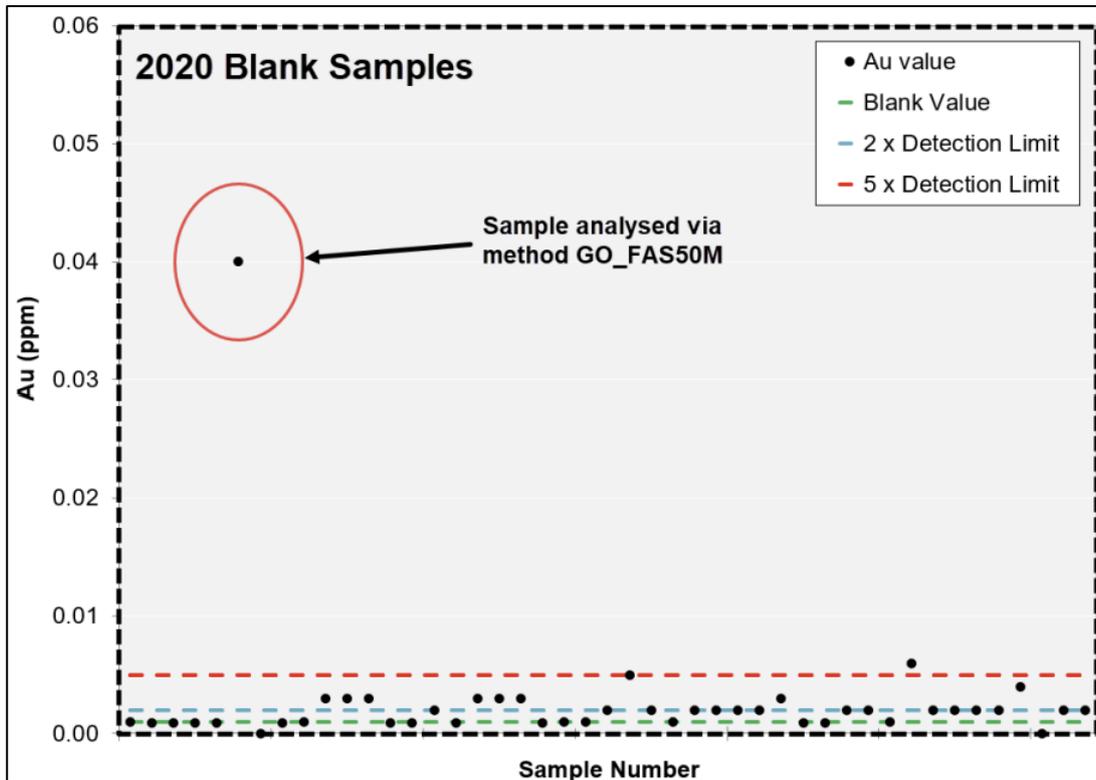
Table 11-5 Summary of QAQC samples from the 2020 drilling program

Sample type		2019 drilling		
		No. of samples	QAQC sample insertion (%)	
QAQC samples	Total samples	1,477		
	Blanks	Coarse blank (Rapakivi Granite)	45	3.0%
		Pulp blank (GLG3143-2)	0	0.0%
		Total blanks	45	3.0%
	CRM	G319-10	0	0.0%
		G914-6	17	1.2%
		G914-7	5	0.3%
		G916-5	18	1.2%
		G916-8	0	0.0%
		Total CRM	40	2.7%
	Duplicates	Field	0	0.0%
		Coarse	0	0.0%
		Pulp	0	0.0%
		Umpire	0	0.0%
		Total duplicates	0	0.0%
	Total QAQC samples		85	5.8%

11.5.4.1 Coarse Blanks

Blanks were inserted into the sample stream at a rate of 3.0%. The blank material was the same locally sourced Rapakivi Granite as previous years. Blank performance is shown in Figure 11-10. All samples were assayed using SGS 50 g fire assay method GE_FAI50V5 which has a low detection limit of 1 ppb Au. Blank samples generally performed well, although two samples returned values >5x detection limit, and one sample returned 0.04 ppm Au. Given that the blank is not certified, the assay method has a very low detection limit, and that a small amount of heterogeneity should be expected, the small number of failures is not considered to be a material issue.

Figure 11-10 Blank data for 2020 drilling program

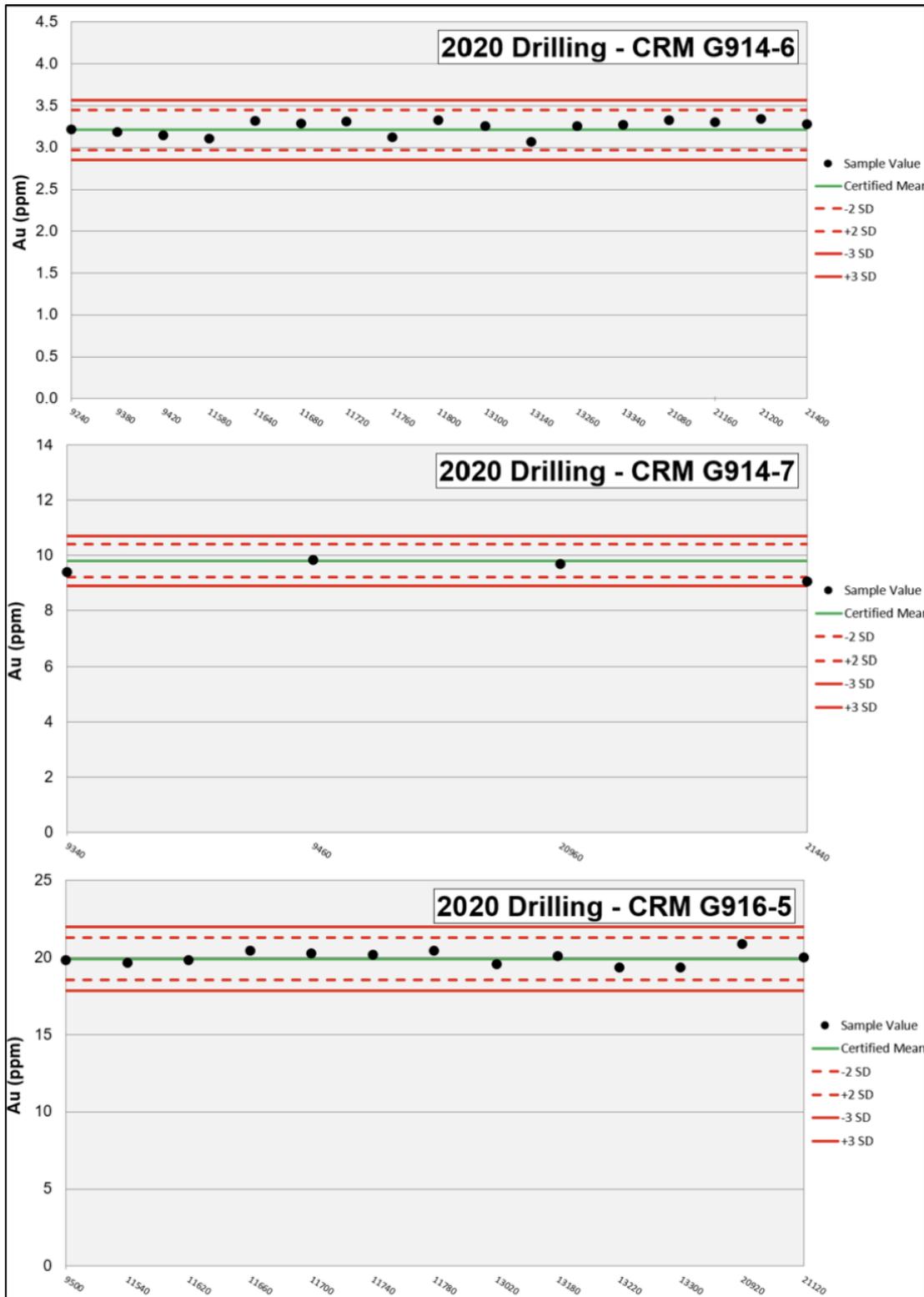


Source: SRK, 2022

11.5.4.2 Certified Reference Materials

The same three CRMs sourced from Geostats Pty Ltd used during the 2017–2019 drilling program were used during the 2020 drilling program, with an overall insertion rate of 2.7%. CRMs performed well, with only one result of CRM G914-7 outside the 2 SD accepted range (Figure 11-11).

Figure 11-11 CRM data for the 2020 drilling program



Source: SRK, 2022

11.5.5 Chain of Custody and Sample Security

Sample bags were sealed with individual numbered tamper-evident seals, then placed into larger bags and sealed with a zip-tie. Samples were then sent by charter boat to Narsarsuaq and handed to a representative of shipping agent Tschudi Logistics who arranged for airfreight to the laboratory.

11.6 Drilling – 2021, 2022, 2023 and 2024

11.6.1 Sampling Methods

A minimum sample length of 0.5 m was used to ensure enough material for the screen-metallics fire assay method. Cores were selectively sampled. For cores with an orientation line (2021 drilling only), the cut line was marked approximately 5–10° off axis, and the right side of the core was sampled consistently, so as to avoid bias and to preserve the orientation line on the remaining half and quarter core.

During the 2021 drilling campaign, three-quarter core samples were taken of Main Vein intersections to increase the sample size. This was done by cutting the core in half, then cutting the remaining half core in half again. The half-core and quarter-core field duplicate samples were assayed separately, then the final grade for the database was calculated as a weighted average using the laboratory weighed sample mass. In 2024, no quarter-core duplicates were taken. 2021 samples were sent directly to ALS Loughrea, Ireland for preparation and analysis. Samples collected in 2022, 2023 and 2024 were prepared at ALS Geochemistry’s containerised preparation laboratory onsite at Nalunaq, before being packaged and sent to ALS Geochemistry in Loughrea, Ireland, for analysis.

11.6.2 Sample Preparation

All samples were prepared using ALS method PREP-31BY. This involves crushing to 70% passing 2 mm, a rotary split to 1 kg, and pulverising the 1 kg subsample split to better than 85% passing 75 µm.

11.6.3 Sample Assay Analysis

All samples were analysed by 50 g fire assay ALS method Au-AA26 which has a detection limit of 0.01 ppm Au. Samples containing visible gold and samples considered to be the Main Vein were assayed with screen-metallics fire assay ALS method Au-SCR24 which has a detection limit of 0.05 ppm Au. This involves screening 1 kg of pulverised sample to 106 µm followed by a gravimetric assay of the entire plus fraction and a duplicate 50 g AAS assay of the minus fraction. In addition, all 2021 samples were assayed with a 48-element four-acid digestion inductively coupled plasma-mass spectrometry (ICP-MS) technique ME-MS61, and all 2024 samples were analysed for silicon, titanium and zirconium using portable-XRF method pXRF-34.

11.6.4 Quality Assurance and Quality Control

The QAQC procedures in 2021 to 2024 varied very slightly by year, with the split of QAQC sample types shown in Table 11-6.

In the 2021 drilling program, quarter-core field duplicates were re-introduced into the sample stream at the request of SRK Consulting. The same CRMs from Geostats as used in the 2017–2020 drilling programs were used again, and an additional CRM was purchased from Geostats, G319-10, which has a certified mean grade of 50.3 g/t Au. This was chosen to give more confidence in lab performance for higher-grade samples. Coarse blanks were inserted at a rate of ~5%. In 2022 and 2023 drilling programs, a low-level gold CRM (GLG314-2) was used as a pulp “blank” given that its certified mean gold grade of 2.98 ppb is well below the detection limit of the fire assay methods used. The use of GLG314-2 was discontinued in the 2024 drilling due to it not being a true blank. Quarter-core field duplicates were omitted from the sample stream again in 2024, for the same reasons described for the 2019 and 2020 drilling, i.e. that the results of quarter and half-core samples are not readily comparable due to the nature of the gold mineralisation.

In the 2024 sampling programs, coarse duplicates and pulp duplicates were added to the sample stream, both at a rate of ~5%.

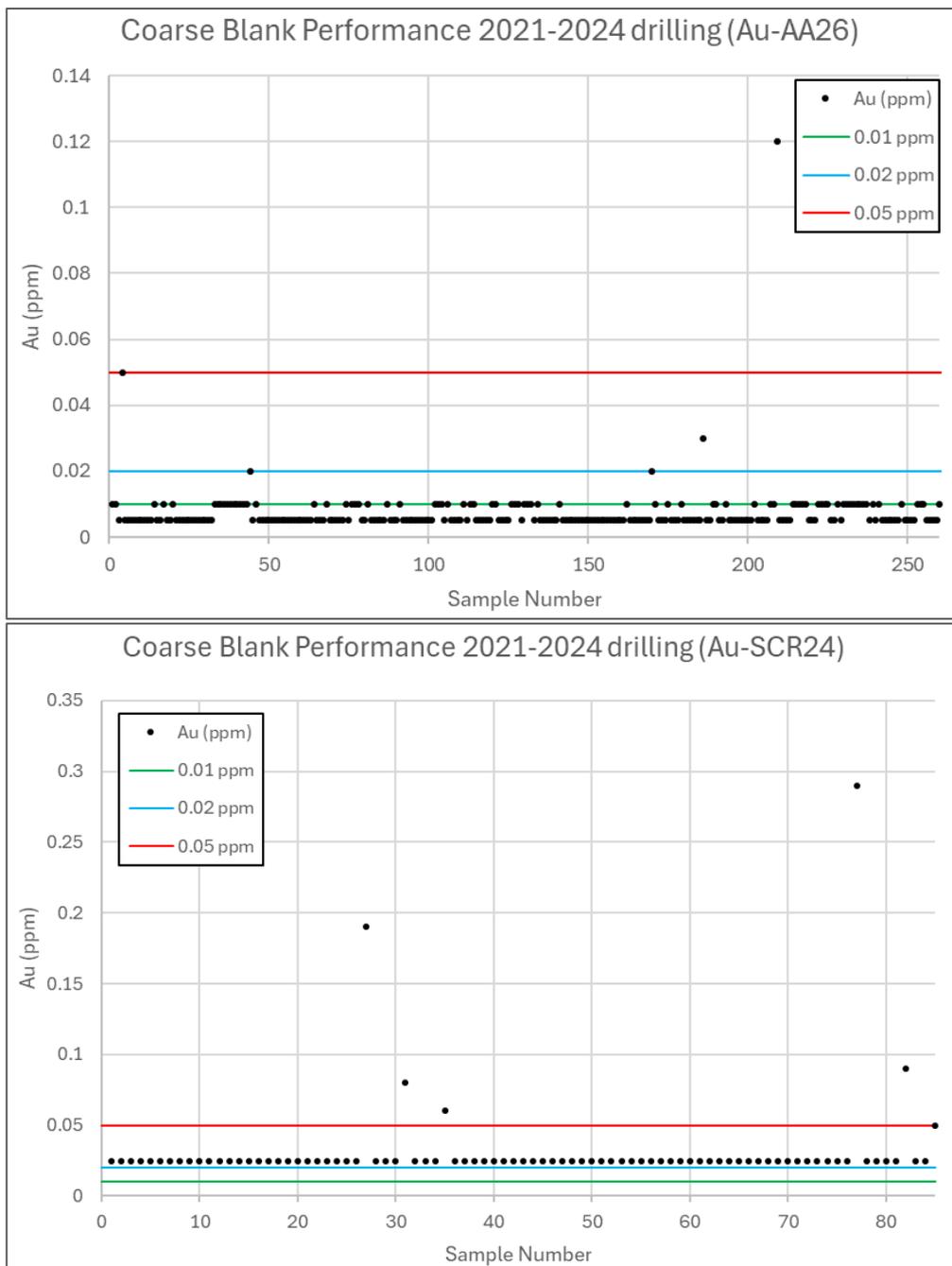
Table 11-6 Summary of QAQC samples from the 2021–2024 drilling campaigns

Sample type		2021 drilling		2022 drilling		2023 drilling		2024 drilling		2021 – 2024 drilling		
		No. of samples	QAQC sample insertion (%)	No. of samples	QAQC sample insertion (%)	No. of samples	QAQC sample insertion (%)	No. of samples	QAQC sample insertion (%)	No. of samples	QAQC sample insertion (%)	
QAQC samples	Total samples	1,895		1,042		708		838		4,483		
	Blanks	Coarse blank (Rapakivi Granite)	144	7.6%	96	9.2%	32	4.5%	73	8.7%	345	7.7%
		Pulp blank (GLG314-2)	0	0.0%	25	2.4%	39	5.5%	0	0.0%	64	1.4%
		Total blanks	144	7.6%	121	11.6%	71	10.0%	73	8.7%	409	9.1%
	CRM	G319-10	4	0.2%	12	1.2%	7	1.0%	16	1.9%	39	0.9%
		G914-6	32	1.7%	13	1.2%	7	1.0%	0	0.0%	52	1.2%
		G914-7	32	1.7%	15	1.4%	11	1.6%	14	1.7%	72	1.6%
		G916-5	38	2.0%	21	2.0%	10	1.4%	0	0.0%	69	1.5%
		G916-8	0	0.0%	6	0.6%	5	0.7%	16	1.9%	27	0.6%
		Total CRM	106	5.6%	67	6.4%	40	5.6%	30	3.6%	243	5.4%
	Duplicates	Field	135	7.1%	54	5.2%	39	5.5%	0	0.0%	228	5.1%
		Coarse	0	0.0%	0	0.0%	0	0.0%	38	4.5%	38	0.8%
		Pulp	0	0.0%	0	0.0%	0	0.0%	46	5.5%	46	1.0%
		Umpire	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
		Total duplicates	135	7.1%	0	5.2%	39	5.5%	84	10.0%	312	7.0%
Total QAQC samples		385	20.3%	242	23.2%	150	21.2%	187	22.3%	964	21.5%	

11.6.4.1 Coarse Blanks

As with previous sampling campaigns, the coarse blank material was a locally sourced Rapakivi Granite and was inserted at a rate of 7.7% across the four drilling programs. Coarse blank performance was generally very good considering that it is an uncertified blank (Figure 11-12). Majority of the samples reported below detection limit (0.01 ppm for ALS method Au-AA26 and 0.05 ppm for Au-SCR24), although five samples did report above detection limit for ALS method Au-AA26 and five samples above detection limit for Au-SCR24, with a maximum grade of 0.29 ppm Au suggesting potential contamination of blank material. Given the small number of samples affected, this issue is not considered material.

Figure 11-12 Coarse blank performance for ALS methods Au-AA26 (LOD 0.01 ppm Au) and Au-SCR24 (LOD 0.05 ppm Au) in the 2021–2024 drilling campaigns

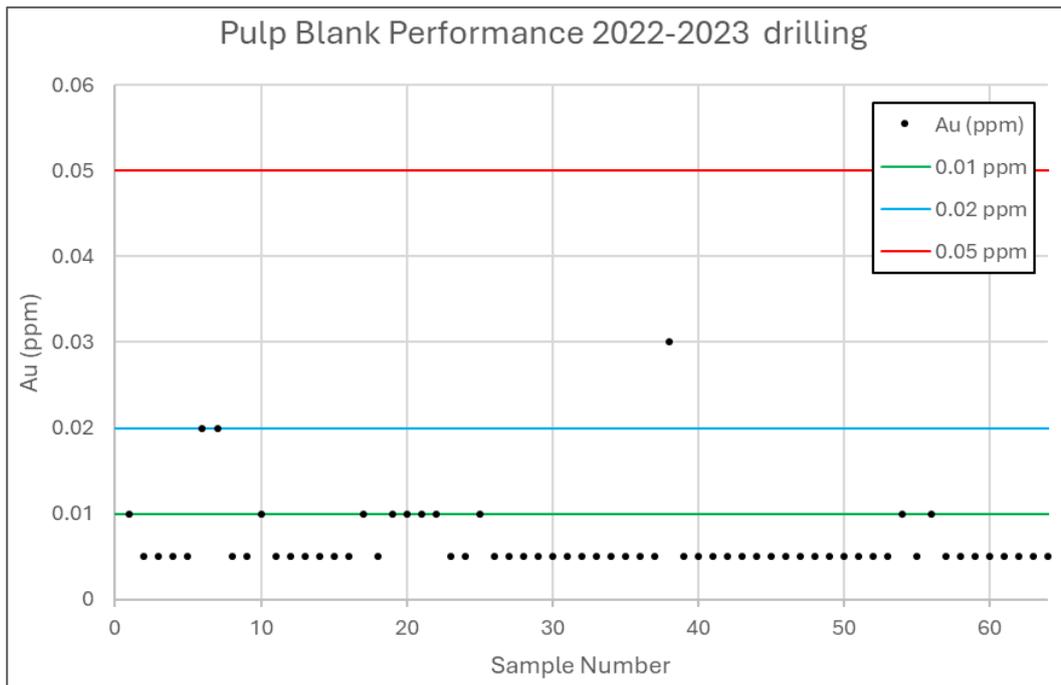


Source: Amaroq

11.6.4.2 Pulp Blanks

A low-level gold CRM was used as a pulp blank during the 2022 and 2023 drilling campaigns. Performance of this CRM is shown in Figure 11-13. All samples returned below 5x detection limit of 0.01 ppm Au, with only one sample above 2x detection limit and the remainder at or below detection limit.

Figure 11-13 Pulp blank performance for the 2022 and 2023 drilling campaigns

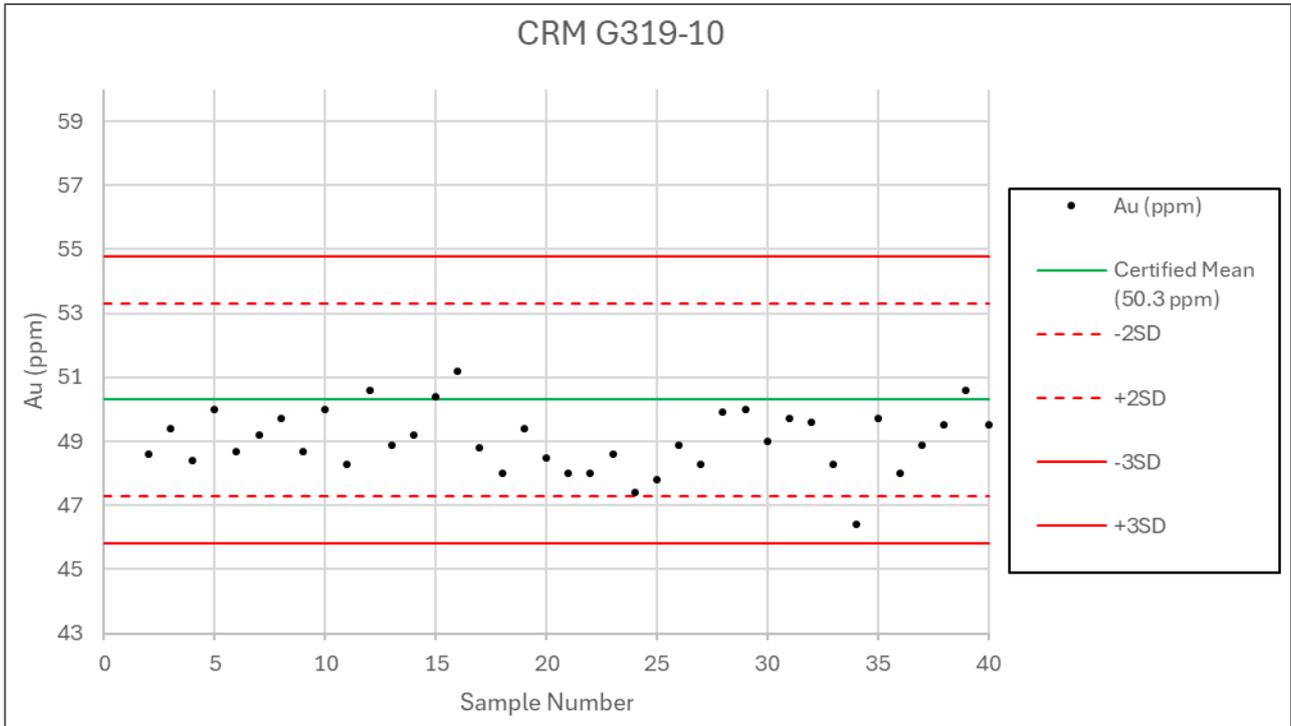


Source: Amaroq

11.6.4.3 Certified Reference Materials

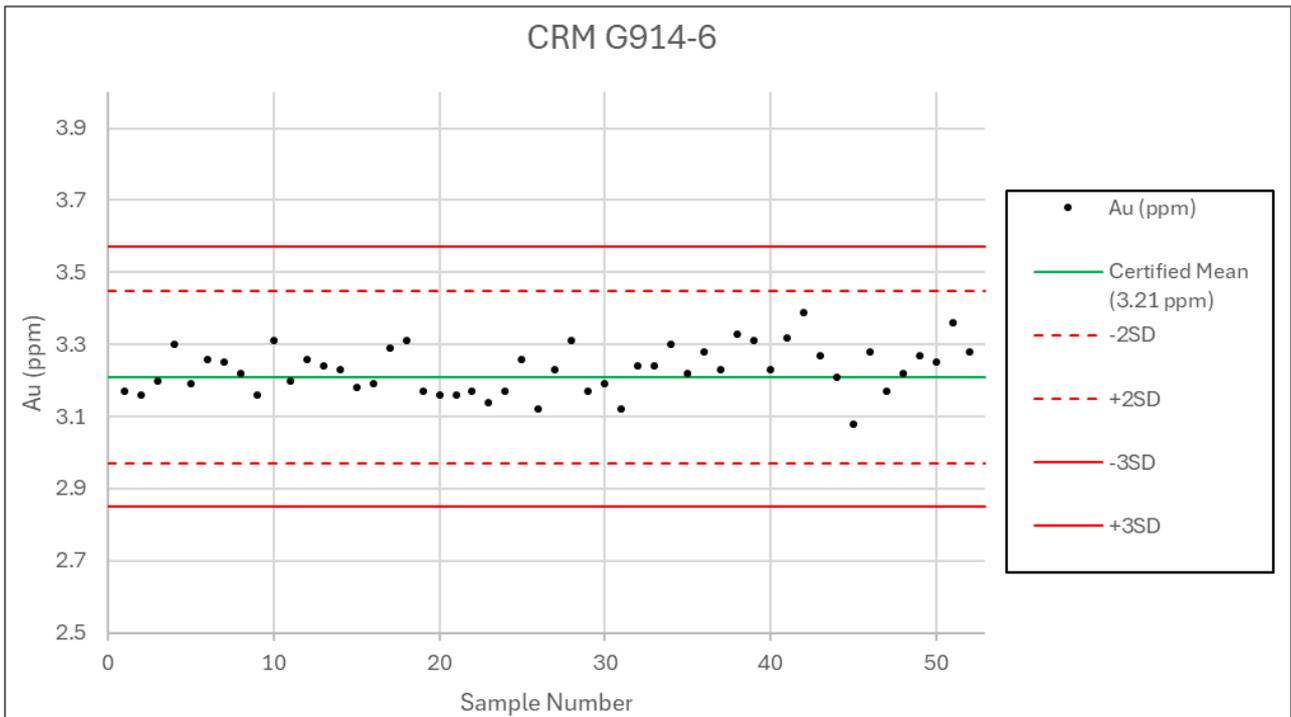
CRMs sourced from Geostats were used again in the 2021–2024 drilling campaigns. CRM G916-8 was used as a replacement for G914-6 from 2022 onwards (certified grades of 3.21 ppm Au and 3.2 ppm Au, respectively) due to Geostats no longer supplying G914-6. CRM performance is shown in Figure 11-14 to Figure 11-18 and was generally excellent, with only four samples falling outside of 2 SD ranges (once for G319-10, twice for G914-7, and once for G916-5), and only one of these falling outside 3 SD (G914-7). The results for high-grade CRM G319-10 (50.3 ppm Au) show a minor negative bias, however, this is not material, and the calibration and accuracy of the analytical equipment can be seen to be suitable for the grade ranges expected of the samples submitted.

Figure 11-14 Performance of CRM G319-10 during the 2021–2024 drilling campaigns



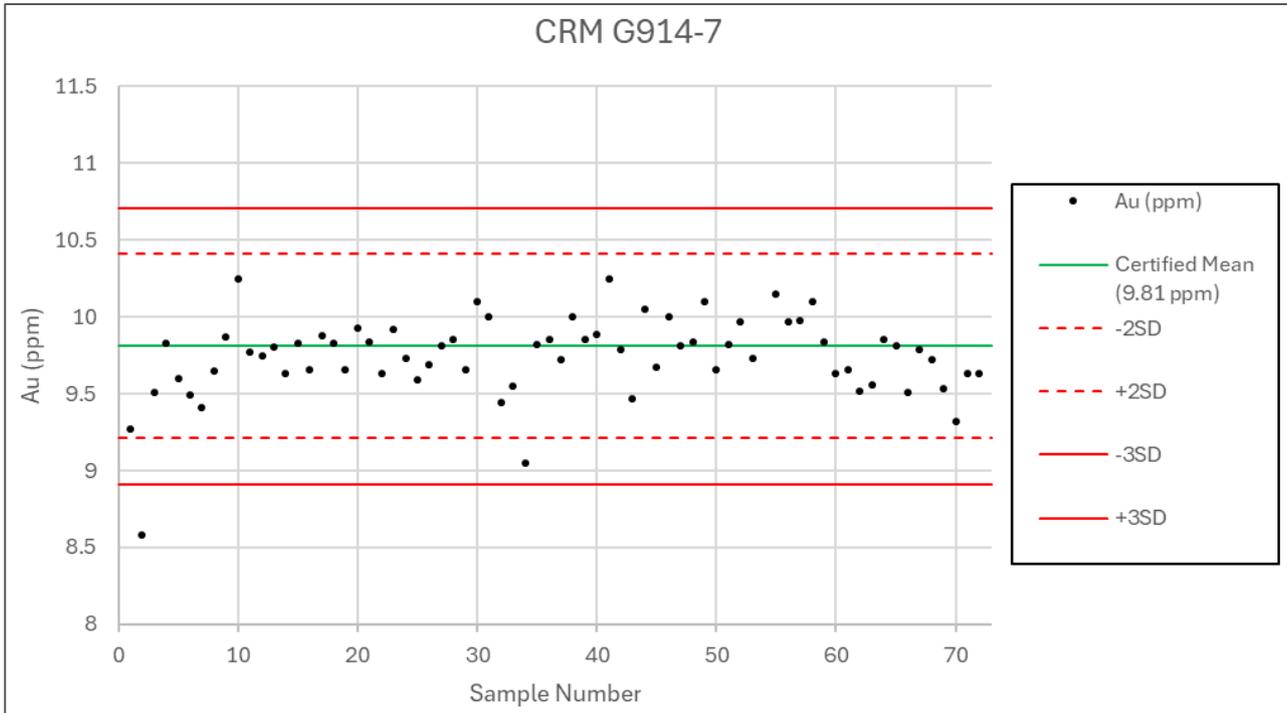
Source: Amaroq

Figure 11-15 Performance of CRM G914-6 during the 2021–2024 drilling campaigns



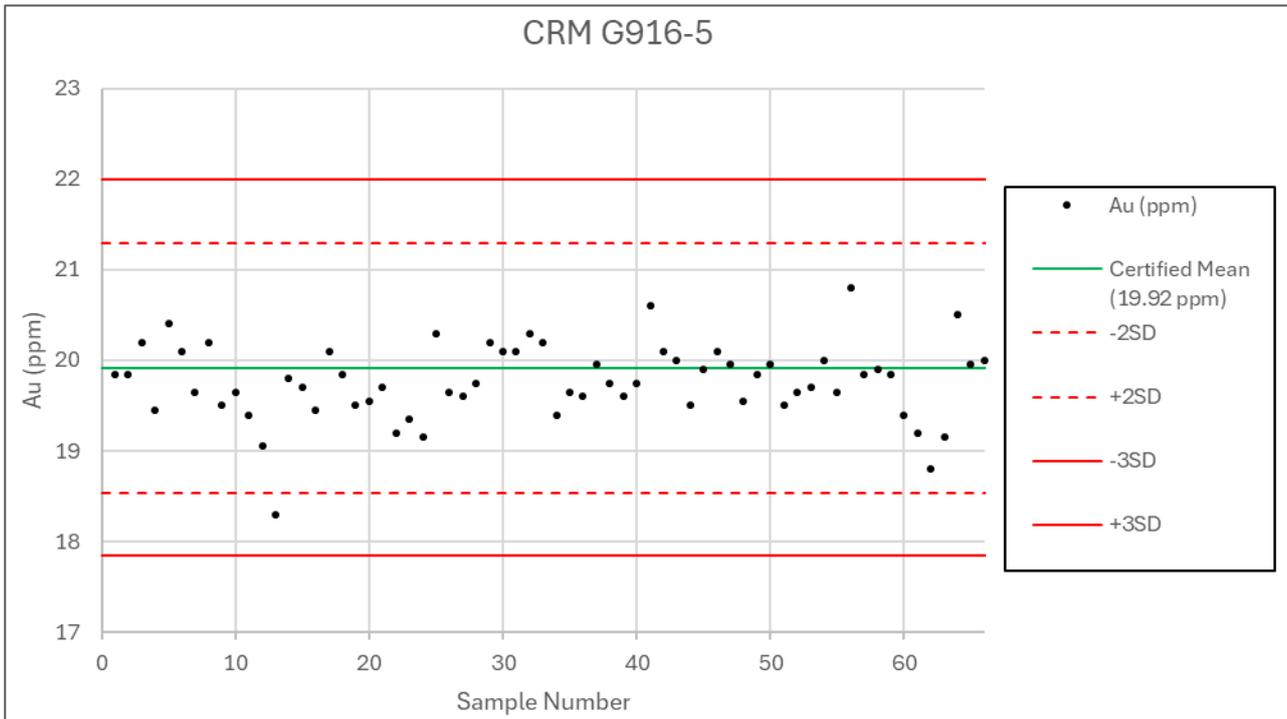
Source: Amaroq

Figure 11-16 Performance of CRM G914-7 during the 2021–2024 drilling campaigns



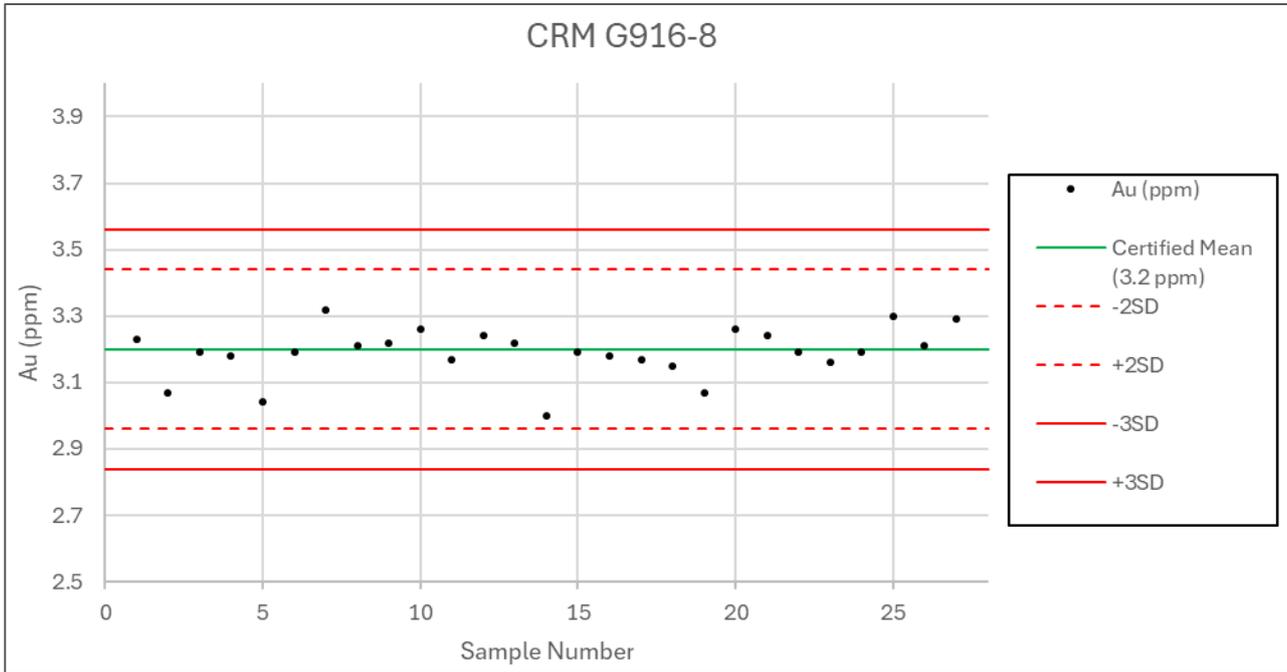
Source: Amaroq

Figure 11-17 Performance of CRM G916-5 during the 2021–2024 drilling campaigns



Source: Amaroq

Figure 11-18 Performance of CRM G916-8 during the 2021–2024 drilling campaigns

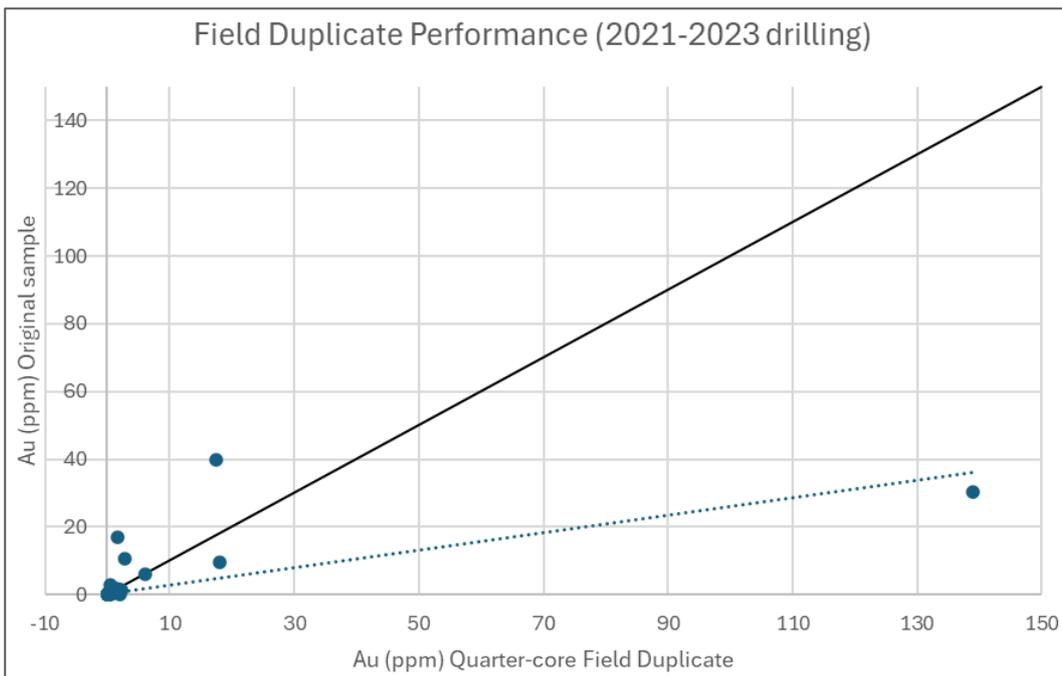


Source: Amaroq

11.6.4.4 Field Duplicates

Quarter-core duplicates were inserted at a rate of ~5% in the 2021, 2022 and 2023 drilling campaigns. Performance is shown in Figure 11-19. The quarter-core samples generally return lower gold grades than the corresponding half-core sample and results can differ significantly, particularly for higher-grade samples which often contain coarse gold. The difference in grades can be attributed to the inherently variable nature of the mineralisation exacerbated by the smaller sample size of quarter core, rather than any issue with the sampling or assay processes in these years.

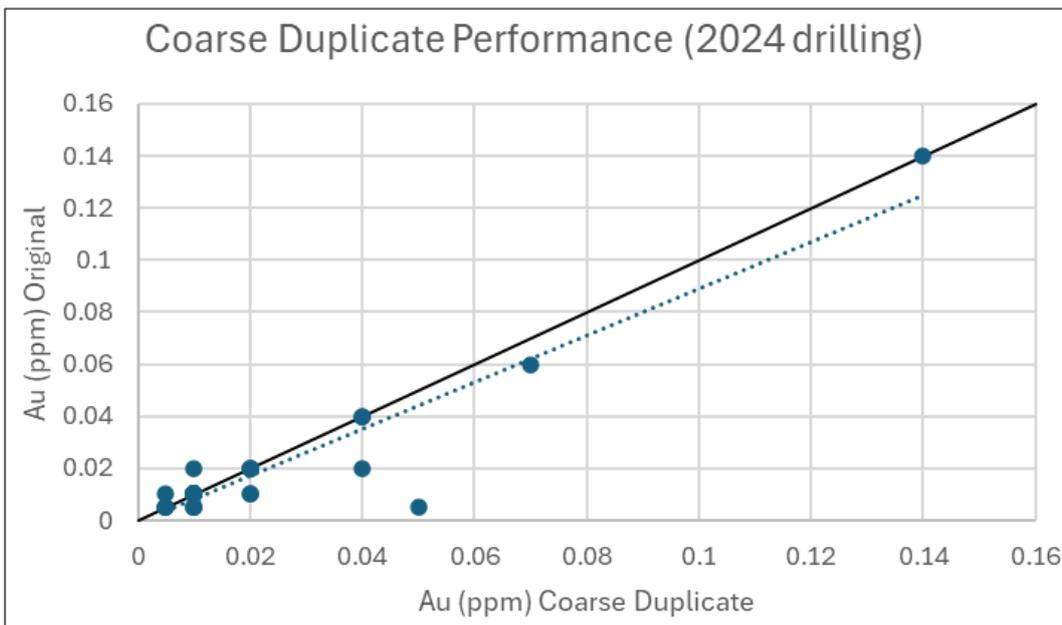
Figure 11-19 Field duplicate performance for the 2021–2023 drilling campaigns



Source: Amaroq

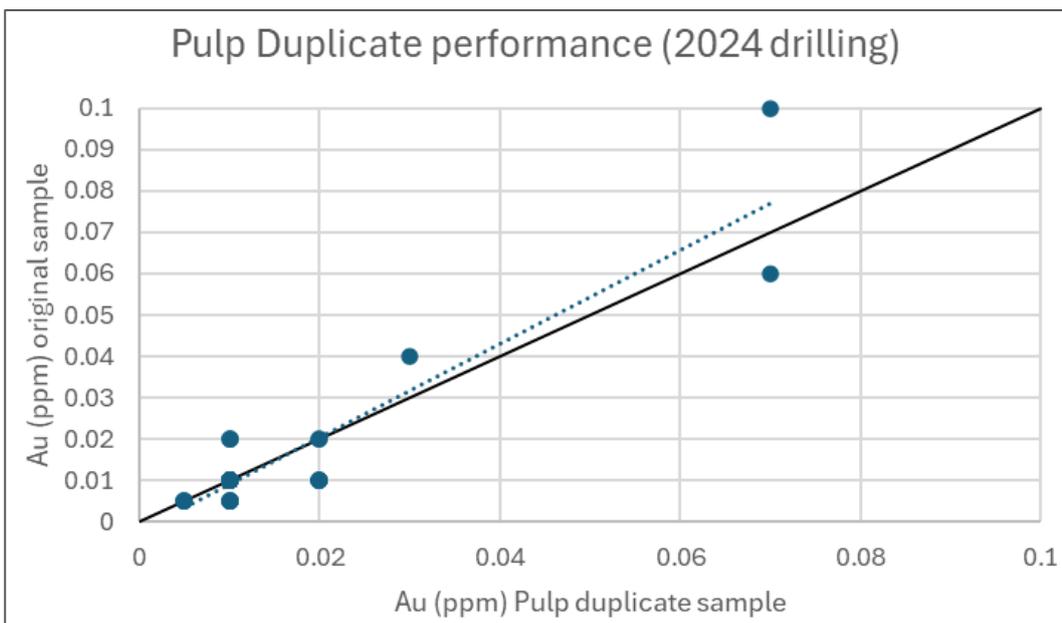
In the 2024 drilling program, a decision was made to include coarse duplicates and pulp duplicates during the sample preparation phase, instead of the quarter-core field duplicates used in previous years due to the sample size of quarter core being deemed inherently inadequate for meaningful interpretation of any results generated in such a coarse gold deposit. Both coarse duplicates and pulp duplicates were inserted into the sample stream at a rate of 5% and results are shown in Figure 11-20 and Figure 11-21. An empty sample bag was numbered with a sample tag with a note “Coarse Duplicate of sample XXXXX” so that staff at the ALS Nalunaq preparation laboratory would know to prepare a duplicate coarse or pulp sample for shipment to Ireland. Performance for both duplicate types is good, although an assessment of prep duplicate performance for higher-grade samples is not possible due to the limited amount of data.

Figure 11-20 Coarse duplicate performance of the 2024 drilling campaign



Source: Amaroq

Figure 11-21 Pulp duplicate performance of the 2024 drilling campaign



Source: Amaroq

11.6.5 Chain of Custody and Sample Security

In 2021, samples bags were sealed with individual numbered tamper-evident seals, then placed into larger bags and sealed with a zip-tie. Samples were then sent by charter boat to Narsarsuaq and handed to a representative of shipping agent, Bollore, who arranged for airfreight to the laboratory. In 2022, 2023 and 2024, all samples were delivered to the Nalunaq preparation laboratory by the senior geologist. Once prepared, sample pulps were packaged in boxes by ALS and delivered to the shipping agent at Narsarsuaq airport by employees of Nalunaq A/S.

11.7 Underground Sampling from 2024 to 2025

Underground sampling at the current mining operation is a combination of face sampling (chip channels) and sidewall sampling (sawn channels). Face samples are primarily taken to guide short-term development and to determine the “payability” of the face, i.e. assign ore to the appropriate stockpile, or to confirm the presence of the Main Vein mineralised structure. Sidewall samples are collected later as sawn channel samples, several rounds behind the working face, and are used to inform the grade control model and for MREs.

11.7.1 Sampling Methods

11.7.1.1 Face Samples (chip samples)

Dimensions of the working face are recorded during the face mapping process in accordance with Amaroq’s Face Mapping Procedure (Nalunaq A/S, 2025a). This is completed with a laser distometer.

Sample lines are marked with spray paint on the wall or face with samples to include the upper contact (hangingwall alteration), quartz vein (Main Vein), and the lower contact (footwall alteration) in accordance with Amaroq’s Face Sampling Chip Sampling Procedure (Nalunaq A/S, 2025b). Sample numbers are spray painted on the wall (1, 2, 3, etc.) along with the face name (i.e. MB742W_250315). A 3D scan is taken with an iPhone 14 Pro using the Scaniverse app which is later georeferenced so that channel coordinates can be assigned in the database in accordance with Amaroq’s Face Underground LiDAR scanning using Scaniverse and Cloud Compare Procedure (Nalunaq A/S, 2025c)

The sampling is carried out as a chip channel, either using a geological hammer with a pointed pick, or if the material is hard using a sharp chisel and a heavier hammer. The size of the individual chips is 20–50 mm, depending on local rock conditions.

Before sampling, and between samples, the sampling equipment will be cleaned as appropriate to avoid sample contamination. Individual sample masses are on the order of 1–2 kg.

11.7.1.2 Sidewall Samples (sawn channel samples)

Samples are collected using a battery-powered handheld diamond blade saw in accordance with Amaroq’s Sidewall Channel Sampling Procedure (Nalunaq A/S, 2025d). Sample lines are marked using white spray paint with the sample number written on the wall above (Figure 11-22). Sample lengths are a minimum of 50 cm with Main Vein samples centred within the sample length. If the Main Vein is >50 cm in thickness, then the sample length is adjusted so that it extends at least 5 cm beyond the footwall and hangingwall contacts. A 50 cm sample yields 1 kg of material, with samples cut to a width of 2–3 cm and a depth of 3–4 cm. The sample collars are later picked up by the mine surveyor. Sample spacing matches the blasting rounds, such that one sample effectively represents 3 m of development.

Figure 11-22 Sidewall samples marked up ahead of sampling with a diamond blade saw



Source: Amaroq

Approximately every 1 in 10 samples, a 1 m channel is also taken across the immediate footwall of the Main Vein, for the purpose of testing for mineralisation in the footwall alteration or footwall veins.

Every sample is assigned a sample ID, and the corresponding sample ticket is placed with the sample material into a plastic sample bag and sealed with a zip-tie before being delivered to the onsite laboratory by the mine geologist.

A coarse Rapakivi Granite blank is inserted after every Main Vein sample and CRMs are inserted at a rate of 1 in 20 samples. Two 50 g packets are submitted for each CRM sample. The CRMs used are sourced from Geostats: G922-2 (3.25 ppm Au), G915-9 (9.8 ppm Au); CRM 3 = G319-10 (50.3 ppm Au). Coarse duplicates and pulp duplicates are inserted, both at a rate of 1 in 20 samples. For these, an empty sample bag is submitted along with the sample ticket and a note “Coarse Duplicate of sample XXXX”, the same procedure as described for the 2024 drilling campaign and shown in Figure 11-23.

Figure 11-23 Bagged samples (drill core in this case) with the duplicate sample bag attached to the parent sample bag with a zip-tie



Source: Amaroq

11.7.2 Sample Preparation

All samples are prepared using ALS method PREP-31BY. This involves crushing to 70% passing 2 mm, a rotary split of 1 kg, and pulverising the 1 kg subsample split to better than 85% passing 75 μm .

11.7.3 Sample Assay Analysis

Samples are analysed for gold using the DetectORE method at the Nalunaq lab, which for Nalunaq samples is reported with a detection limit of 0.02 ppm Au.

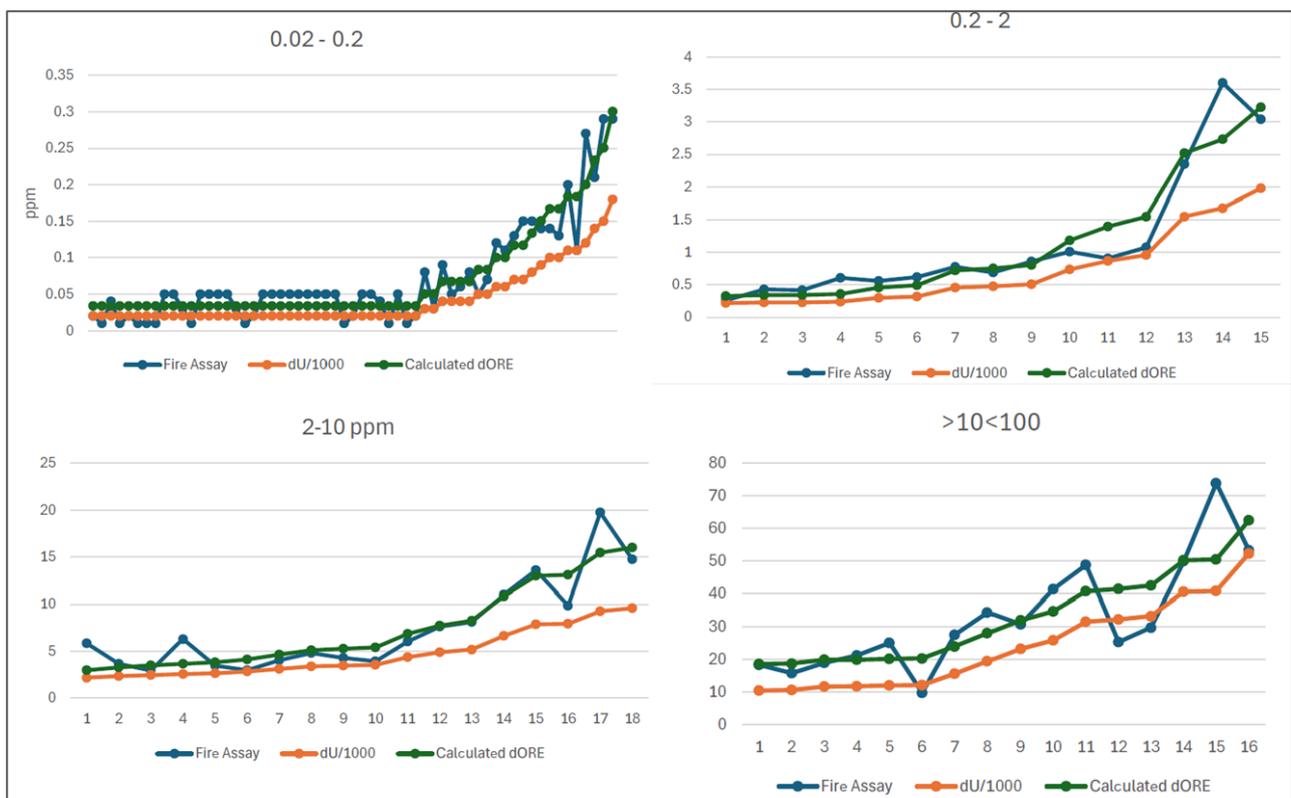
The DetectORE method was invented by Australia's national research agency, CSIRO, in 2016. An Australian company, Portable PPB, was incorporated shortly afterwards to commercialise this technology, which underwent field trials from 2019 to 2021 on RC drill samples, soil samples, laterite samples and diamond drilling samples from projects in Australia, Africa and the Americas. The technology was commercially launched in 2022, with marketing focused on the low detection limits (<20 ppb Au), and its suitability for rapid sample turnaround (<8 hours) thereby making it a useful method for remote soil sampling campaigns, for example, where the operator could react quickly to results and adjust the campaign as necessary. The technology broadly involves digesting the prepared samples by mixing with a proprietary reagent (GLIX-20), adding a collector device, and then measuring the collector device with a portable XRF to obtain a gold value (Portable PPB, 2025).

At Nalunaq, the method involves:

- Weighing samples into a specifically designed pouch
- Pouches are loaded into a mixer and rotated for a designated period of time with a non-toxic, non-hazardous reagent (typically 8–12 hours)
- Gold is leached from the sample/reagent solution and deposited on a PPPB collector device residing within the pouch
- After the designated mixing time, the collector device is removed from the pouch, rinsed and dried
- Collector devices are then measured with a portable XRF configured with a specific detectORE calibration
- The entire process (sampling and analysis) is controlled by pLIMSTM, PPPB’s proprietary software (with extensive in-built QAQC)
- Gold results in parts per billion (ppb) are calculated and reported by pLIMSTM in detectORE Units (dU).

DetectORE is not a total assay technique and hence the results will always be lower than a total assay. Comparisons with fire assay results based on samples collected in H2 2024 (Houlahan and Lonsdale, 2024) have demonstrated that calibration equations set by grade ranges are required for use in stockpile management, grade control and mine planning purposes (Table 11-7).

Figure 11-24 Ranked raw DetectORE assay results (orange) vs fire assay (blue) indicating correlation and the calculated/calibrated DetectORE results (green) following the equations outlined in Table 11-7



Source: Amaroq

Table 11-7 DetectORE calibration equations

DetectORE result (ppm Au)	Calibration equation
0.2–2.0	$Au (g/t) = (DetectORE\ Result \times 1.6472) - 0.0347$
2–10	$Au (g/t) = (DetectORE\ Result \times 1.7556) - 0.833$
>10	$Au (g/t) = (DetectORE\ Result \times 1.0497) + 7.5972$

In addition to the DetectORE method, all sidewall samples are sent to ALS Loughrea in Ireland for fire assay analysis by method Au-AA26 which uses a 50 g charge and AAS finish. Method Au-GRA22 is used for over-limits (>100 g/t Au) which uses a gravimetric finish. The database is then updated using the fire assay results, for the purposes of MREs etc. As well as serving as a basis for ongoing QAQC of the method and updates to calibration formulae, the DetectORE results are primarily used for short term mine planning. Confidence in the DetectORE technique enabled a very small number of underground samples to be included within the MRE4 estimate. A total of 98 samples used in the MRE used this technique, which represents 1% of the total database and therefore is not a material impact on the MRE.

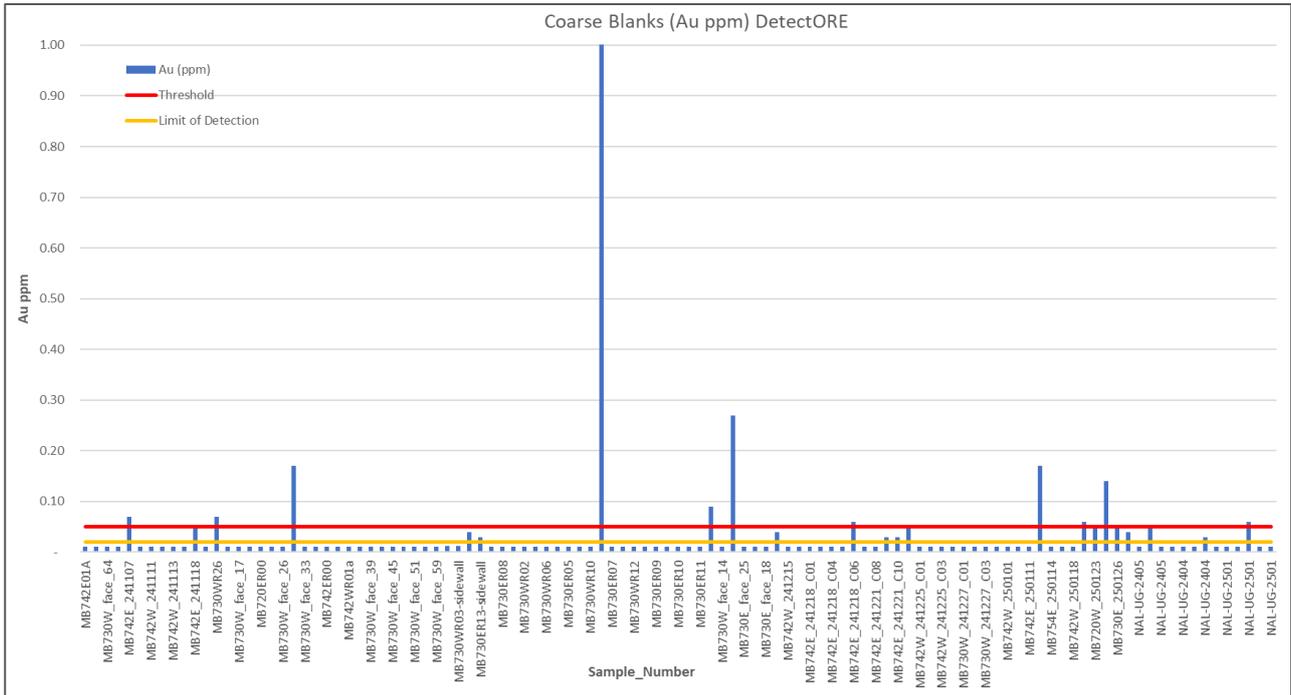
In future, it is planned to replace the DetectORE method at Nalunaq with a standard aqua regia digest and AAS finish.

11.7.4 Quality Assurance and Quality Control

11.7.4.1 Coarse Blanks

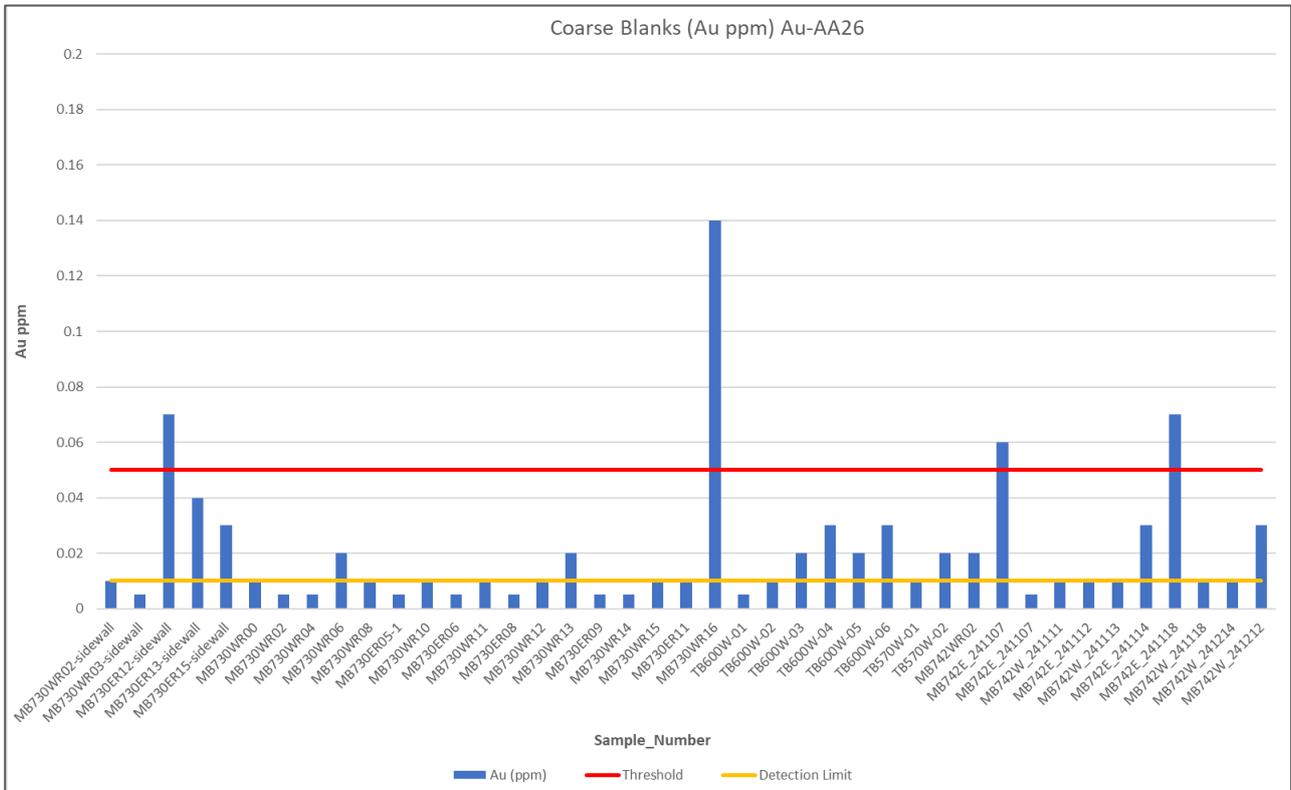
Blank performance by DetectORE (DTL) and Fire Assay (ALS method Au-AA26) is shown in Figure 11-25 and Figure 11-26. Given the blank is not certified and is known from previous drilling campaigns to occasionally return values at detection limit, a failure threshold of 0.05 ppm is used. A relatively high number of failures suggest occasional contamination between samples during the preparation stage, likely by previous high-grade Main Vein samples and insufficient cleaning of the equipment. However, ultimately these are still very low levels in comparison to the ore grades at Nalunaq and are not deemed by Bara to have any material impact on the MRE. Controls have recently been put in place at Nalunaq to improve blank performance, including trialling the use of a different barren granite rock sourced from Nanortalik, and the use of ALS “wash” methods WSH-21x and WSH-22x during the preparation stage after suspected high-grade samples (e.g. Main Vein samples). These methods involve cleaning the crusher and pulveriser equipment respectively with barren material and retaining the material for assay to assess performance. Wash samples will be inserted in addition to the coarse blanks.

Figure 11-25 Performance of Rapakivi blanks analysed by DetectORE method



Source: Amaroq

Figure 11-26 Performance of Rapakivi blanks analysed by Au-AA26 method

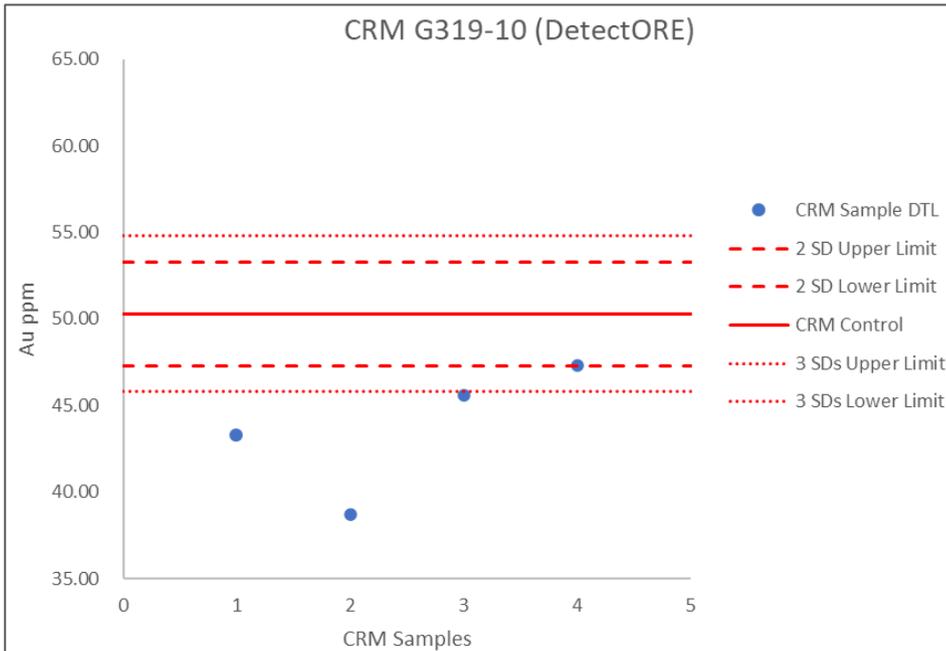


Source: Amaroq

11.7.4.2 Certified Reference Materials

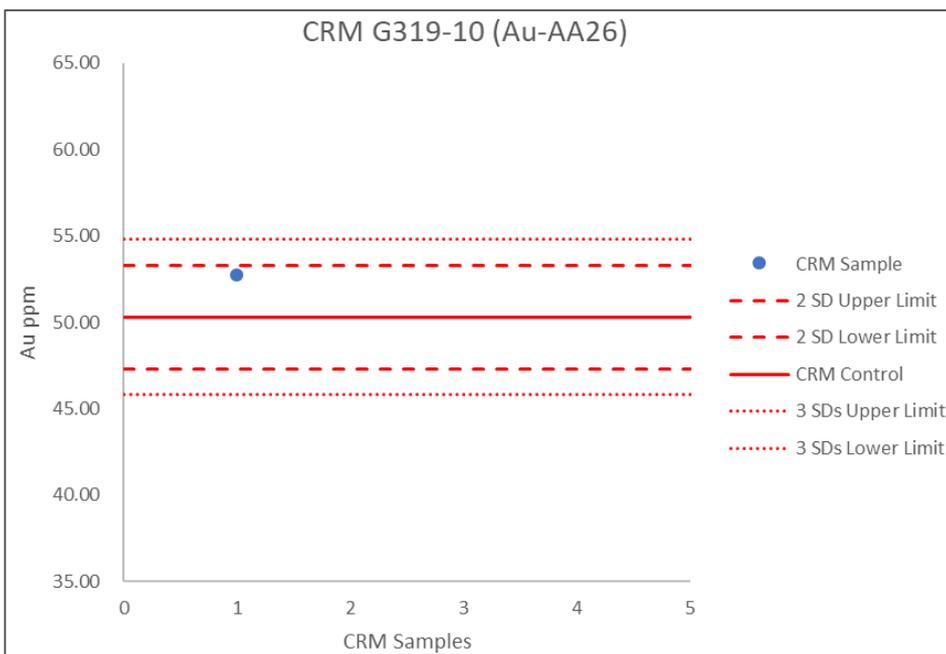
Performance of the three Geostats CRMs is shown in Figure 11-27 to Figure 11-32. Despite the limited number of samples, it is generally observed that CRM results fall within acceptable limits when using the fire assay method, but usually outside acceptable limits (2 SD) and with a slight negative bias when using the DetectORE method. It should be noted that the CRMs are certified by 50 g fire assay and aqua regia methods only and, as such, there is expected to be a negative bias when assessing these against raw uncalibrated results from a non-total assay technique such as DetectORE.

Figure 11-27 Performance of CRM G319-10 by DetectORE



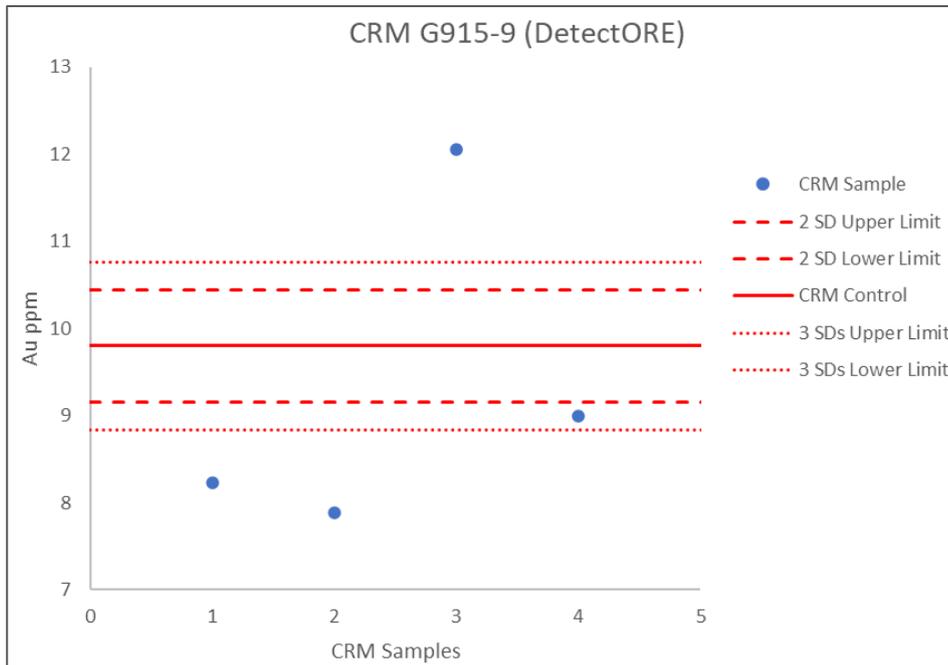
Source: Amaroq

Figure 11-28 Performance of CRM G319-10 by 50 g fire assay (Au-AA26)



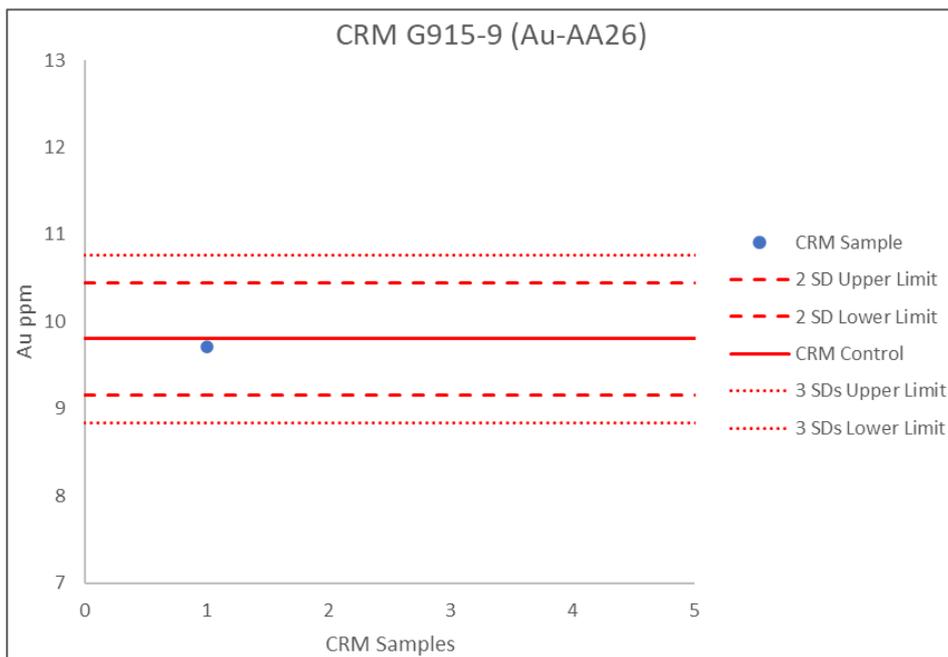
Source: Amaroq

Figure 11-29 Performance of CRM G915-9 by DetectORE



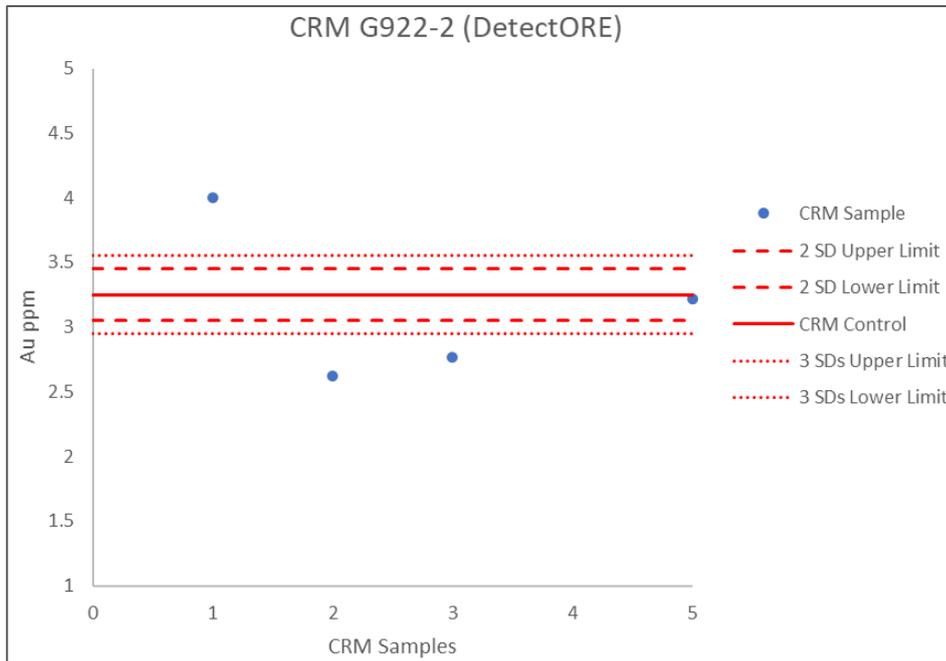
Source: Amaroq

Figure 11-30 Performance of CRM G915-9 by 50 g fire assay (Au-AA26)



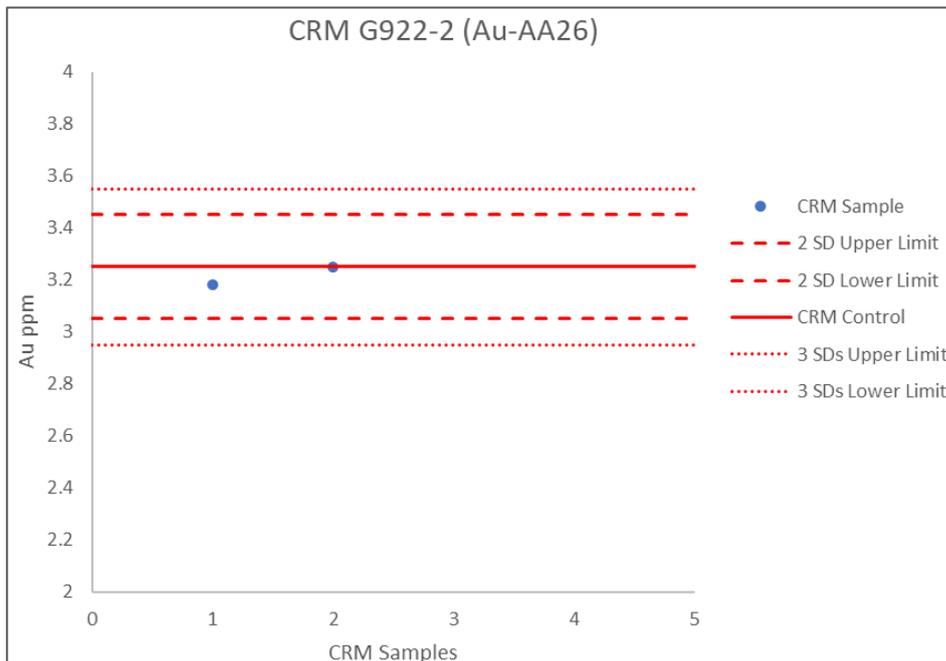
Source: Amaroq

Figure 11-31 Performance of CRM G922-2 by DetectORE



Source: Amaroq

Figure 11-32 Performance of CRM G922-2 by 50 g fire assay (Au-AA26)

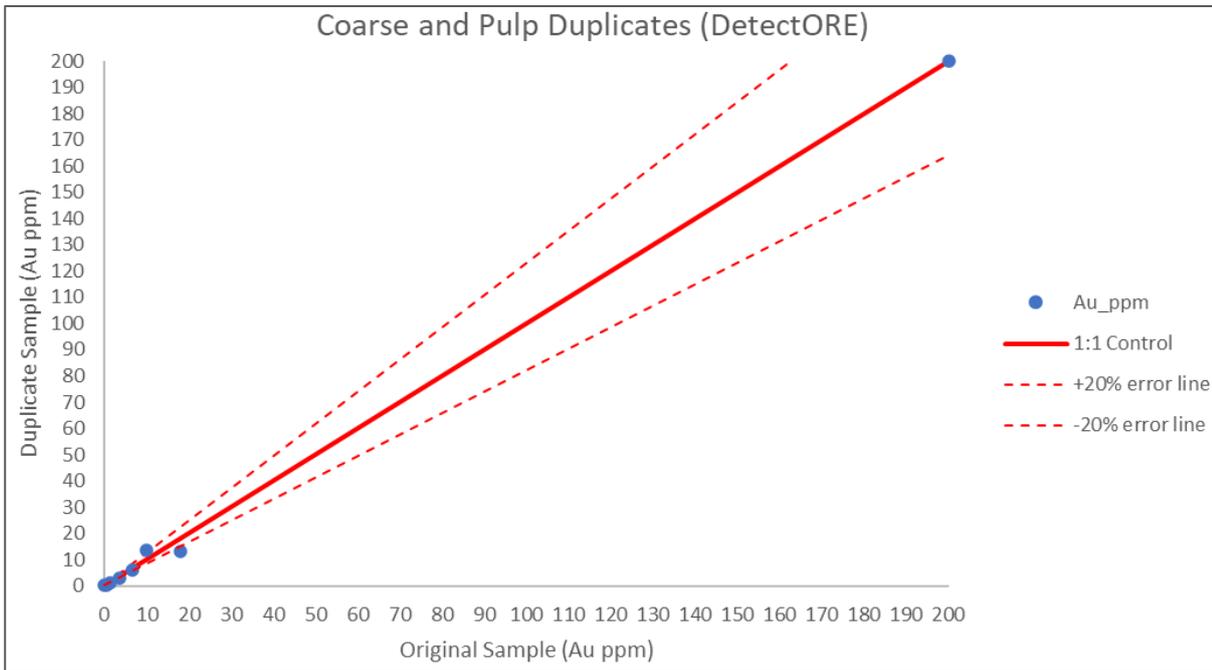


Source: Amaroq

11.7.4.3 Coarse and Pulp Duplicates

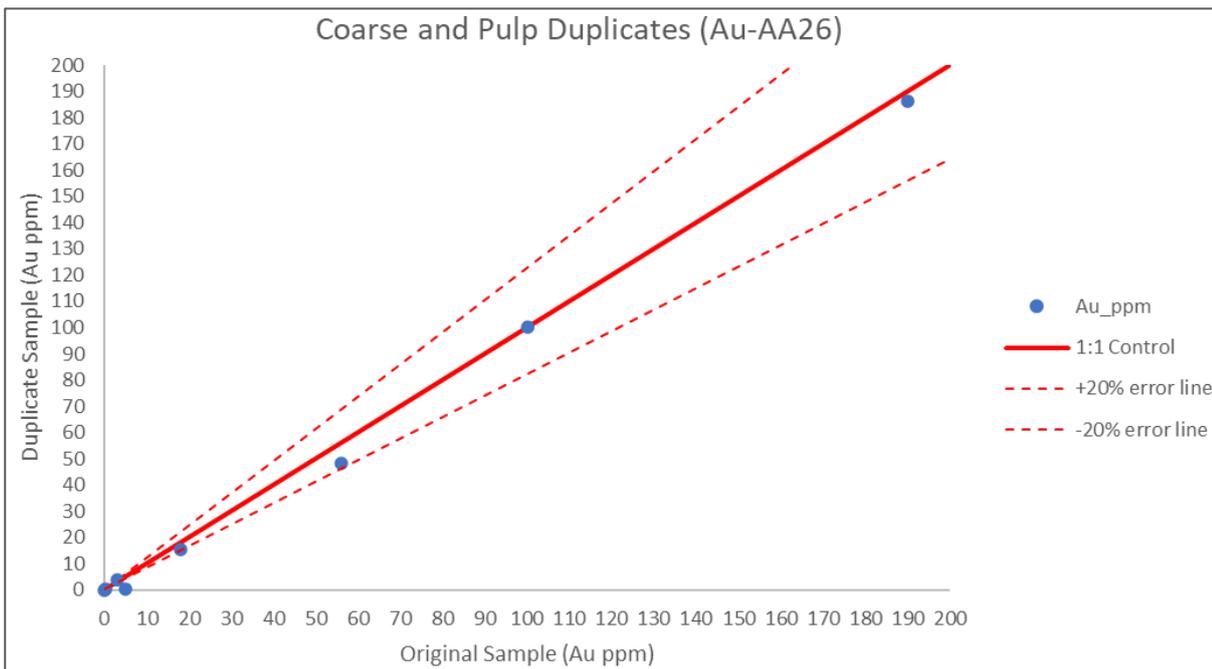
Performance of the coarse and pulp duplicates for the DetectORE and Au-AA26 methods is shown in the chart below. Performance of the duplicates is seen to be acceptable when measured with both methods.

Figure 11-33 Coarse and pulp duplicate performance for DetectORE samples



Source: Amaroq

Figure 11-34 Coarse and pulp duplicate performance by 50 g fire assay (Au-AA26)



Source: Amaroq

Duplicate analysis of the DetectORE analysis in particular shows the preparation and repeatability of the technique is robust. Whilst the CRM performance is adequate, ongoing assessment to calibrate the DetectORE results so that comparison with certified fire assay values is more accurate is recommended.

Overall, Bara is of the opinion that the assay data to be used for the MRE displays sufficient accuracy and precision to be considered of suitable quality to be used for the Mineral Resource Estimate.

12 DATA VERIFICATION

12.1 Historical Data Verification

As part of the process of updating the MRE for Nalunaq “MRE4”, the majority of data verification undertaken by Bara was on the new data acquired as part of the 2023 and 2024 drilling seasons. Bara reviewed the three previous iterations of the Mineral Resource that had been estimated by international consulting firm SRK and considered that historical data had largely been validated to an appropriate standard to be included in an MRE. This previous review work included review of previous QAQC and assessments of bias between sample methods, and concluded the data was suitable for inclusion in an MRE.

It was also observed that Amaroq had utilised SRK ES to ensure data collection and validation procedures implemented during their tenure of the Project were aligned with international best practice. Bara has also reviewed the current procedures and data validation methods employed at Nalunaq through the review of the 2023 and 2024 datasets, both virtually and on site, and consider that they are fit for purpose. Amaroq has a self-storage unit in Cardiff, UK containing archived documents from previous operators spanning the history of the project that the Qualified Person and the Bara Senior Geology Consultant, Zoe Scannell visited on two separate occasions in September 2024. Relevant information pertaining to the MRE and the wider project was inventoried by the Qualified Person in the initial visit prior to a return visit for study in more detail by the Bara Senior Geology Consultant.

Unfortunately, Bara did not have the opportunity to visit the core storage unit at the airport warehouse in Narsarsuaq during the site visit time in Greenland but has reviewed photographs of the facility that show large amount of core in adequate storage at the facility.

12.2 Qualified Person Site Visit – 2024

The Qualified Person, Mr James McFarlane, visited the site, along with Senior Geology Consultant, Zoe Scannell, between 6 and 10 August 2024. The visit included a tour of the Project area, including two drill pad areas on the mountain (from 2023 and 2024 drilling campaigns) for verification of drillhole collar positions.

Time was spent in the core yard with the onsite geologists discussing logging and QAQC procedures as well as a visual assessment of the mineralisation morphology, the geology of the deposit including host rocks and sample selection technique. Ongoing process improvements were discussed as well as the methodology for sample selection and logging in particular of previous core, contained in the current MRE update.

Underground development areas, including active headings and historically mined areas, along with discussions with the onsite Underground Mine Geologist further enhanced knowledge of the current and legacy procedures for the use of underground sampling and mapping.

A visit was also undertaken of the ALS onsite preparation laboratory and of the detectORE assay facility alongside the processing plant facility (still under construction during the visit).

12.3 Database Checks and Independent Verification

The current drilling database, that includes all drilling data alongside underground and surface chip and channel samples was provided by the Company to Bara within a Leapfrog project, as well as access to the Re-Tool logging database utilised by the Amaroq geologists to enter and store information.

Several checks were carried out of the data that progressed into the MRE, namely:

- Spot checks of the data entry in Re-Tool (data listed as from 2004) compared to Au_ppm values in the drilling database
- Checks of data entry procedure, comparing logging and gold entries from the geological logging portal to the PostgreSQL database
- Checking of 100% of the 2022, 2023 and 2024 (“new” data compared to previous MRE iteration) gold assay data against assay certificates issued by ALS, made available to Bara from Amaroq
- Using Leapfrog Geo to assess the drilling database for errors – sample interval overlaps, missing intervals and invalid values handling
- Visual validation of drillhole traces for incorrect relationships to topography, kinks in survey information.

Minor errors identified were raised with Amaroq, who made appropriate corrections.

The Qualified Person is of the opinion that the data provided to inform the MRE is of adequate quality and is valid for use.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

Significant metallurgical testwork has been completed on ore samples from various parts of the deposit throughout the course of the Project history. Detailed summaries of historical testwork prior to Amaroq's ownership of the Project can be found in the 2002 feasibility study completed for Crew Gold (Kvaerner, 2002). SGS carried out cyanide leaching testwork on a Nalunaq ore sample for Angel Mining PLC in 2011. Two metallurgical samples were collected underground in 2016 by SRK ES and analysed for gold content at SGS Minerals Services Ltd ("SGS") in Cornwall, UK. These samples were used for additional gravity and flotation testwork in 2020 which has been used alongside historical testwork to design the current processing flowsheet.

Gold ore at Nalunaq contains a high proportion of coarse gold which is recoverable using gravity methods. Other heavy minerals such as arsenopyrite, löllingite, iron and copper sulphides are also present in mineralised material and are included in the gravity concentrates. Testwork supports flotation as a viable method to recover additional gold.

Current and planned processing facilities comprise the following main systems:

- Crushing
- Dust collection
- Grinding
- Gravity recovery
- Flotation circuit
- Tailings thickening
- Tailings filtering
- Gold room (used for smelting the gravity concentrate into doré).

13.2 Previous Project Testwork

13.2.1 Mineralogy – 1998, 1999

A single gold ore sample was analysed by Lakefield Research Limited in 1998 (Lakefield Research, 1998a) for mineralogical characterisation. Microscopic analysis and x-ray diffraction indicated the sample to be dominated by silicate minerals (quartz, hornblende, clinopyroxene, chlorite, plagioclase, muscovite, carbonates, epidote, biotite, titanite and clays) making up 85–97%. Sulphide minerals make up 3.5% to 6.5% and include pyrrhotite, arsenopyrite, pyrite, chalcopyrite and covellite. Iron-titanium oxides included ilmenite, magnetite and goethite. Pyrrhotite, chalcopyrite, pyrite, ilmenite and magnetite were observed to be partially replaced by iron-oxy-hydroxides (goethite) mainly along the rim but also along thin fractures. Carbonate minerals made up ~1% of the sample.

Eight samples were submitted for mineralogical examination in 1999 (Lakefield Research, 1999) and showed the presence of >90% quartz, with low concentrations (<5%) of feldspars, amphibole, chlorite and traces of tourmaline, carbonates and muscovite. The vast majority (~90%) of the gold grains occur as inclusions in silicate minerals, with the remainder associated with grain boundaries and inclusions in sulphide minerals and sulphosalts.

13.2.2 Grindability – 2000

A limited number of grindability tests were undertaken on samples from the Nalunaq deposit. The Bond Rod Mill Work index was measured at 15.1 kWh/t and the Bond Ball Mill Work index at 13.9 kWh/t (Lakefield Research, 2000). Abrasion index was not measured but there are comments in several reports indicating that the ore is abrasive due to the high concentrations of quartz present in the ore.

13.2.3 Gravity, Flotation, Leaching – 1998

Bench-scale metallurgical testwork was completed on a 400 kg bulk sample of Nalunaq ore by Lakefield Research in 1998 (Lakefield Research, 1998b). This sample was collected from the outcropping Main Vein in the Target Block area by NunaOil A/S. Approximately 40% of the sample by mass was classified as quartz vein material with the remainder classified as altered footwall and hangingwall material. Samples were taken to be representative of anticipated mining widths. Processes investigated were gravity separation by several techniques, followed by flotation or cyanidation of the gravity separation tailing. The test sample was relatively high grade with average of 97.1 g/t Au and 10.7 g/t Ag, approximately five times higher than the anticipated overall Nalunaq ore grade of ~20 g/t Au.

Tests were conducted to determine the effect of grind size and equipment/process selection on gold recovery by gravity separation. Tests were undertaken on a Wilfley shaking table with concentrates upgraded by a Mozley separator. Three grind sizes were tested: 134 µm, 192 µm, and 265 µm (K80). Separation efficiency increased with grind fineness. At 134 µm, 85% of gold and 90% of silver were recovered to the Wilfley concentrate. The Mozley concentrate recovered 76% of gold and 78% of silver in 0.045% of the original mass. Mozley concentrate grades were 180,143 g/t Au and 19,808 g/t Ag.

The impact of equipment selection was also tested. Two tests were operated using Knelson and Falcon Superbowl concentrators with a grind size c. 140 µm. The centrifugal concentrators were able to reduce the mass recovery in the rougher stage and produced higher cleaner concentrate grades and recoveries. The Knelson concentrator recovered 81% of gold and 78% of silver with 0.55% mass recovery in the rougher stage. The Knelson test cleaner concentrate was upgraded on the Mozley separator from 13,513 g/t to 226,950 g/t Au with 78% gold recovery. The Falcon concentrator recovered 75% of gold and 72% of silver with 0.51% mass recovery in the rougher stage. The Falcon test cleaner concentrate (performed on the Mozley separator) was upgraded from 13,397 g/t to 262,000 g/t Au with 73% gold recovery. The Falcon tailings gold grade was approximately 6 g/t higher than tailings from the Wilfley or Knelson tests.

Flotation tests were performed on gravity tailings samples with and without regrinding. Rougher flotation was completed following a simple sulphide-gold flotation system with potassium amyl xanthate and Cytec R208 applied as collectors and methyl isobutyl carbinol (MIBC) as the frother. Four incremental rougher concentrates were collected over a total flotation time of 15 minutes at natural pH. Re-grinding showed improved flotation performance with up to 82% of the gold being recovered (stage recovery) and an overall recovery of 96% when combined with gravity recovery.

Cyanide leaching tests were undertaken on gravity tailings samples with and without regrinding. Tests were performed in a 1 g/L sodium cyanide solution at pH 10.5–11 (using lime) for 48 hours. The reground sample recovered 93% of the gold. When combined with gravity results, an overall recovery of 98.4% was achieved. The gravity followed by cyanidation seemed to yield better overall recovery when compared to the gravity flotation circuit. It should again be noted that these tests were performed on samples with very high head grades when compared to the life-of-mine average (roughly five times higher).

It was recommended to complete further testwork on a sample which more closely represents the actual anticipated grade of the orebody.

13.2.4 Feasibility Study Testwork – 2002

Four metallurgical testwork programs were undertaken as part of the 2002 feasibility study (Kvaerner, 2002, (Appendix 6A)) by Lakefield Research, GRG testwork (by André Laplante), Gekko Systems, and Falcon Concentrators.

13.2.4.1 Lakefield Research, Canada

Work performed by Lakefield Research, Canada included:

- Sample composite preparation
- Head and product analyses
- Bond grindability tests
- Impact work indices (performed by Hazen Research for Lakefield Research)
- Gravity separation
- Flotation
- Cyanidation of gravity tailings and concentrate
- Cyanide detoxification
- Carbon adsorption testwork
- Thickening tests
- Rheology.

Majority of the testwork was performed on two samples: 450 Level Comp 1 (24.9 g/t Au, 0.8 g/t Ag) and 350 Level Comp 2 (6.1 g/t Au and 1.5 g/t Ag). These composite samples were produced from samples collected as part of a comprehensive bulk sampling program undertaken by Strathcona in 2000 from mining on levels 350, 400 and 450 (Strathcona, 2001).

Crushing and Bond Work indices indicate moderate ore hardness. The testwork generally confirmed the pre-feasibility testwork findings (Lakefield Research, 1998b), that gold is readily recoverable by gravity separation but that to recover the final 15–20% of the gold requires flotation or cyanidation.

Several grind sizes were tested. The finest grind (73 µm) showed the best results. Using a Knelson concentrator gave 83% gold recovery with 0.9% mass recovery in the rougher stage for the 450 level sample. The 350 level sample showed 77% gold recovery with 0.9% mass recovery. Mozley concentrates gave 77% and 62% gold recovery with 0.03% (62,063 g/t Au) and 0.02% (24,162 g/t Au) mass recovery, respectively. High-grade and low-grade samples were also tested. Gravity recoveries to low-grade concentrates do not vary much, even with large changes in head grade. Gold recoveries to a gravity concentrate of about 1 wt.% of the ore were 79% and 85% for head grades of 6 g/t and 35 g/t Au, respectively.

Cyanidation (bottle roll) tests were performed on the gravity tails. Conditions were 40% solids, pH 10.5–11, 0.5 g/L NaCN (maintained) and retention time of 48 hours. The effects of grind size, reduced cyanide concentration, effect of air vs oxygen and pulp density were tested. High-grade and low-grade samples were tested as well as a bulk sample and intensive leaching. Recovery of gold from gravity tailings by cyanidation varied only between 90% and 95%, despite wide variations in sample head grade.

The optimum testwork results showed 98.2% overall gold recovery using gravity and tailings cyanidation. Flotation tests were effective, but results were inferior to the tailings leach flowsheet. Cyanide detoxification testwork showed the Inco SO₂/Air system to be superior to the alkaline chlorination process in terms of reagent usage (cost) and the final effluent contained <0.5 mg/L CN_{WAD}, copper and iron.

Mineralogical characterisation was undertaken on a flotation cleaner concentrate sample and a gravity concentrate. The flotation concentrate mainly comprised non-opaque minerals (e.g. quartz, garnet, pyroxene, chlorite) with moderate concentrations of pyrite, pyrrhotite and arsenopyrite (ranging from 3% to 15%). Majority of the gold was present as native gold (64%). For the gravity concentrate, the majority of gold (54%) was present as liberated native gold, while 43% of the gold reported as grain having attachment or inclusions of non-opaque minerals.

13.2.4.2 André Laplante, McGill University, Canada

Gravity.Recoverable.Gold.Testwork

The 450 level composite sample tested found 89% gravity recoverable gold (GRG) content with coarse and liberated GRG. The 350 level composite sample tested found 85% GRG content with intermediate/coarse and liberated GRG.

The overall recommendation was to actively pursue further engineering work for a gravity circuit in the flowsheet. The use of an in-line pressure jig was suggested to treat the full grinding circuit circulating load. Plant gravity recoveries were anticipated to potentially reach 60% in such a circuit.

13.2.4.3 Gekko Systems, Australia

Gravity.Separation.and.Intensive.Cyanidation.Testwork

Gekko Systems tested the use of the in-line pressure jig and in-line leach reactor on a mixed sample of 450 level and 350 level composite.

Gravity proved effective at producing a concentrate with 80% gold recovery in roughly 2.5% of the mass at grades ranging from 525 g/t to 712 g/t Au. Gold extraction using the intensive cyanidation on the gravity concentrate was greater than 97% after 4–8 hours. Recommendations included the use of the in-line pressure jig and in-line spinner bowl for gravity recovery. Intensive leaching conditions were effective in achieving high gold recovery with reduced retention times.

13.2.4.4 Falcon Concentrators, Canada

Gravity.Separation.Testwork

Falcon Concentrators performed tests simulating the operation of a continuous Falcon “C” on the 450 level and 350 level composite samples at a grind size of 70 µm. Rougher testing showed that c. 80% gold recovery could be achieved while recovering between 13% and 19% of the mass, respectively. The cleaner test showed improvement in concentrate grade, but still at unacceptably high weight recoveries.

It was concluded that the use of gravity separation alone to produce smeltable or saleable concentrates would result in an unacceptable loss of gold.

13.2.4.5 Summary of Feasibility Testwork

The testwork showed that a process route comprising crushing, grinding, gravity separation with smelting of the gravity concentrate and with cyanide leaching and CIP of the gravity tailings could recover 96% of the gold to doré bars. Incorporation of intensive cyanidation of a lower grade gravity concentrate instead of smelting the concentrate increases the gold recovery to 97–98% to doré bars. The ore also contains about 1.6 g/t Ag. Silver recovery to doré is expected to be about 79% silver.

Testwork showed that the ore is easy to crush and is of moderate grinding hardness, although will be abrasive due to the high silica content. The majority of the gravity recoverable gold is coarse and, based on the testwork, a gravity circuit based on Gekko in-line pressure jigs was recommended.

13.2.5 SGS Cyanide Leaching Testwork – 2011

SGS Minerals Services UK Ltd was commissioned by Angel Mining PLC in 2011 to carry out metallurgical testwork on samples from Nalunaq in order to investigate the ore's amenability to cyanide leaching. The objective was to obtain data relating to potential gold recovery from plant feed material at different grind sizes, densities and cyanide strengths, thereby determining the optimum operating parameters for the underground processing plant at Nalunaq.

The head grade of the material provided was 9.67 g/t Au and 1.67 g/t Ag. The leach recovery of the gold over 24 hours suggests a 95% recovery at a density of 30% solids and cyanide strength 0.5 g/L NaCN with grind size of 75 µm. Silver recovery is also high between 85% and 95%.

13.3 Recent Metallurgical Testing

13.3.1 Metallurgical Testwork Sampling (SRK, 2016)

Material was collected from two locations in the South Block by SRK ES (SRK ES, 2016):

- 300 Level East, South Block (Sample ID: 290 15EW):
 - The sample was taken from the tops of pillars on the western and eastern sides of stope number 290-15, with the majority taken from the western side. The total amount sampled was 209.10 kg.
- 310 Level West, South Block (Sample ID: 300 18):
 - The sample was taken from the tops of pillars on the western and eastern sides of stope number 300-18. Material from the hangingwall and Main Vein was taken from the western side, whilst the footwall was sampled on the eastern side. The total amount sampled was 201.60 kg.

In both cases, the samples were taken such that they were representative of a true mining width of 1.5 m. Thus, they include material from the hangingwall, Main Vein, and footwall, thereby emulating the dilution that may occur during normal mining operations.

Sampling lines were marked on the walls using spray paint and, in the 300 Level, a series of parallel cuts were made using a petrol-driven diamond-bladed rock saw. Material between the cuts was then broken out using an electrical rock breaker or a hammer and chisel.

Each sample was crushed to 3.35 mm, homogenised and 1 kg split out. This split was then crushed to 1 mm and pulverised to 80% passing 75 µm. Gold analysis was carried out by Wheal Jane Laboratory in Cornwall, UK on behalf of SGS using a screen-metallics fire assay method, results are shown in Table 13-1.

Table 13-1 Head grades of samples taken from stopes 290-15 and 300-18

Sample ID	Weight (kg)	Au (g/t)	Ag (g/t)
290 15EW	209.1	147.23	14.73
300 18	201.6	39.03	2.4

13.3.2 Ore Sorting Testwork (TOMRA, 2019)

Approximately 500 kg of typical Nalunaq mineralised material was sourced from the 460 Level in Target Block and shipped from Nalunaq to TOMRA Sorting Solutions in Wedel, Germany for ore-sorting test work. The sample was hand-picked from broken material in the drive. Twenty eight percent of the sample mass was mineralised quartz vein material with the remaining 72% being unmineralised amphibolite and granite. The sample was representative of the relative proportions of different rock types on the 460 Level. Historical development sample grades in this area vary between 1.4 g/t and

696 g/t Au. There was a large variance in feed grade between individual testwork runs, from 10 g/t to 108 g/t Au.

Tests were operated on two particle size fractions: 20–40 mm and 40–60 mm material (typical particle sizes in crushing circuits and amenable to ore sorting). Throughout testing, the ability to effectively sort mineralised quartz vein was clearly demonstrated and results from the tests were positive. Significant upgrades of gold were achieved in the four tests which were operated (two using a laser sensor and two using an x-ray transmission sensor). The best results were obtained for 40–60 mm material using the laser sensor which achieved 99.4% gold recovery with a concentration factor of 2.61 (38% mass recovery). Laser sorting was considered effective for Nalunaq ore as long as the presence of quartz is a reliable proxy for gold mineralisation.

13.3.3 Flotation Testwork (SGS, 2020)

A sample was submitted for comminution testing, mineralogical analysis, gravity separation testing and flotation testing. This was blend of reject material from samples collected underground by SRK in 2016, and material returned from the ore sorting test work by TOMRA.

An extended gravity recoverable gold (E-GRG) test was conducted on the Master Composite which had a mean head grade of 17.7 g/t Au. Three stages of gravity recovery were performed at P80 of 602 µm, 263 µm and 68 µm achieving cumulative gold recoveries of 58.1%, 78.7%, and 90.3%, respectively.

Different combinations of flotation agents were tested. Flotation recovery to the final cleaner concentrate was 72.0% (96.9% overall recovery with gravity and flotation) at a concentrate gold grade of 195 g/t.

13.4 Current Process Flowsheet

The current process flowsheet was established and selected based on various key historical data and supported by various metallurgical testwork program in the 2002 feasibility study (Kvaerner E&C, 2002) and updated by Amaroq in 2020 by optimising flotation testwork. The latter provided important key findings pertaining to the performance of a flotation process vs a typical cyanide leaching recovery process.

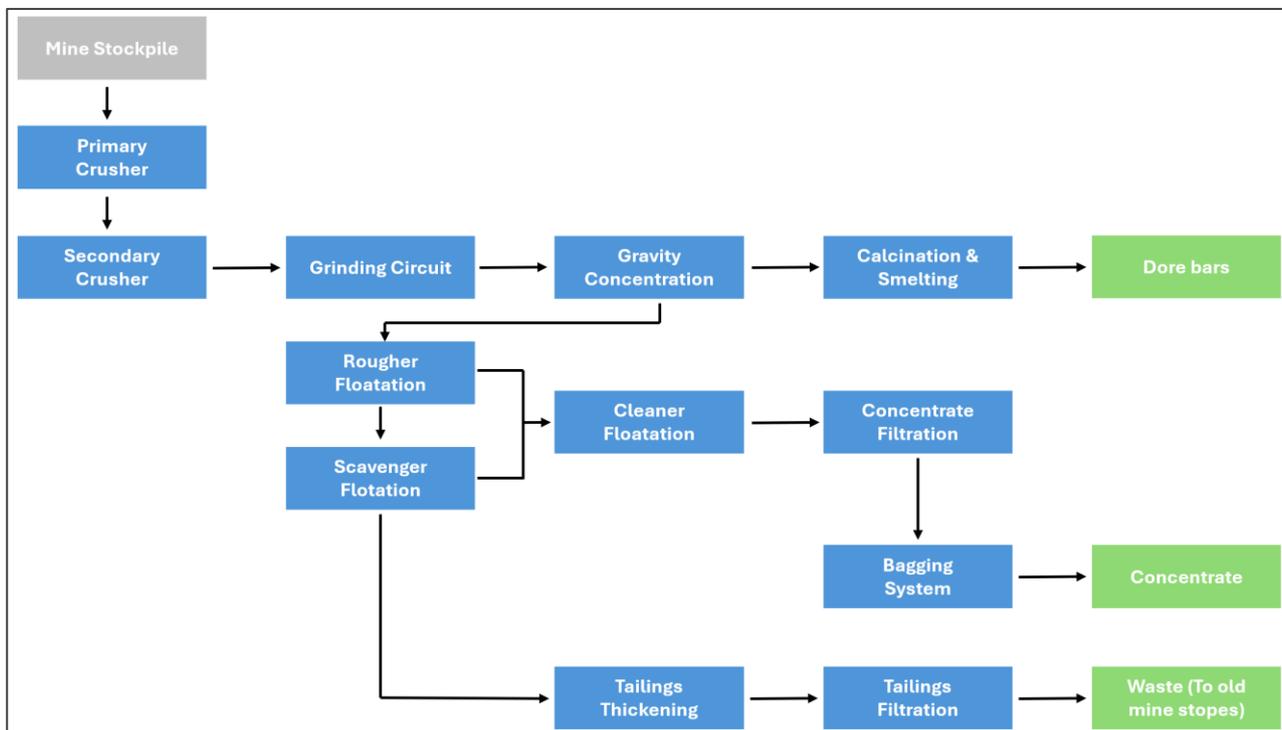
The processing facilities will comprise the following main systems:

- Crushing
- Dust collection
- Grinding
- Gravity recovery
- Flotation
- Tailings thickening
- Tailings filtering
- Gold room (used for smelting the gravity concentrate into doré).

The process flow is developed around the high propensity of the gold at Nalunaq to be recovered in a gravity concentration circuit, calculated from previous testwork to be in the order of 65–75%. An additional 20–25% of the gold in the remaining slurry will be recovered by the flotation circuit downstream of the gravity concentration circuit. The process relies on the flotation behaviour of the auriferous sulphide minerals, by using reagents to separate these from the non-sulphide gangue. Using this technique, sulphidic elements are concentrated to the top of a flotation cell and collected through an overflow launder, while other materials remain in suspension and are supplied to the tailings stream.

A block diagram of the processing process flow is presented in Figure 13-1.

Figure 13-1 Block diagram of the processing process flow



Source: Amaroq

14 MINERAL RESOURCE ESTIMATES

14.1 Introduction

Bara has collated all the available information from Amaroq as well as legacy and previous NI 43-101 reports to prepare an updated MRE in accordance with CIM standards. The MRE (“MRE4”) and accompanying Statement is the responsibility of the Qualified Person, Mr James McFarlane.

This section describes the estimation methodology and approaches used to estimate the Mineral Resources at Nalunaq, including input data validation and key assumptions considered by Bara from data provided by, and communications with Amaroq. Bara is satisfied that the Mineral Resource Estimate reported herein is a robust representation of the grade and tonnage of the deposit at the current level of sampling and understanding of the geology at Nalunaq.

Leapfrog Geo (with the Edge extension for estimation) version 2024.1 was used to validate the PostgreSQL database, highlighting errors and warnings in collar, survey, lithology and assay data as well as validating 3D wireframes, compositing data, geostatistical analysis, block model parameter runs for scenario selection and estimation. Reporting from the chosen block model was also undertaken in Leapfrog Geo after assessment of cut-off grade and grade-tonnage reporting.

Bara has undertaken the following processes in order to produce the MRE:

- Database review (including QAQC assessment, error correction and inputs validation)
- Validation of wireframe geological models
- Statistical analysis and definition of domain boundaries
- Geostatistical analysis, i.e. variography of sample data within estimation domains
- Block modelling and grade interpolation using Leapfrog Edge software
- Model validation
- Mineral Resource classification
- Understanding the requirements of reasonable prospects for eventual economic extraction (RPEEE)
- Cut-off grade assessment
- Reporting of the Mineral Resource Statement.

Additional validation checks on variography and kriging neighbourhood analysis (KNA) for block size as well as minimum and maximum samples validation were also carried out in Snowden Supervisor version 9.

14.2 Mineral Resource Database

The database used for the MRE was provided to Bara within a Leapfrog Geo project, titled “2025-02-27 Nalunaq Leapfrog Project Processed_JSupdate”. The data cut-off for this project was 15 February 2025. Amaroq personnel validated the data, and the final Leapfrog project was provided to Bara on 27 February 2025. The Leapfrog project contained all drilling and channel samples, mineralisation wireframes for Main Vein (and 75 Vein) as well as the updated underground mine void survey with an effective date of 23 February 2025. Access to the portal “Re-Tool” was also provided, which allowed additional verification with the geologists input database. Re-Tool is Amaroq’s primary database where geological logs, validated assay results and sample submissions are input directly as they are created. This is then directly linked to the drilling database within Leapfrog, so access to both enables closer verification of output data used in the MRE with input data as created by Amaroq geologists.

QAQC was provided as comma separated values (CSVs) as well as raw assay certificates from the 2015–2023 drilling campaigns, in addition to data provided as part of the Leapfrog project. Previous block models (in Leapfrog and Datamine format) were also provided.

The database that was received in the Leapfrog project was validated by Amaroq personnel and additional checks by Bara prior to commencement of the Mineral Resource estimation. The database contained 9,524 “collar” positions for samples – split into channel samples, chip samples (surface and underground combined) as well as surface and underground drillholes. A summary is presented in Table 14-1.

Table 14-1 Summary of sample numbers in Nalunaq database

	Channel samples	Chip samples	Surface drillholes	Underground drillholes	Total
Total count	1,473	7,474	336	241	9,524
% of total	15%	78%	4%	3%	100%
Total metres	1,115	5,708	65,083	5,841	77,746
% of total	1%	7%	84%	8%	100%

A full breakdown per campaign, including a yearly breakdown from 2022 is shown in Table 14-2.

Table 14-2 Breakdown of sample numbers and types provided in the Nalunaq database

Nalunaq Sampling Campaigns Summary							
Supervising company	Phase	Sampling methods	No. of holes/ channels	Metreage	Total campaign metreage	Holes % of total	Campaign metres % of total
Nunaoil and Cyprus Greenland Corporation	Pre-production (1992–1993)	Channel samples	1,410	1,052	16,156	14.8%	20.8%
		Chip samples	1,147	885		12.0%	
		Surface drilling	90	14,219		0.9%	
		Underground drilling	-	-		-	
Crew Gold	Production (2004–2009)	Channel samples	-	-	26,508	-	34.1%
		Chip samples	5,697	4,678		59.8%	
		Surface drilling	83	16,258		0.9%	
		Underground drilling	237	5,572		2.5%	
Amaroq Minerals	2015 – 2021	Channel samples	-	-	21,142	-	34.1%
		Chip samples	356	36		3.7%	
		Surface drilling	102	21,106		1.1%	
		Underground drilling	-	-		-	
Amaroq Minerals	2022	Channel samples	9	9	8,791	0.1%	11.3%
		Chip samples	2	0.20		0.0%	
		Surface drilling	44	8,782		0.5%	
		Underground drilling	-	-		-	
Amaroq Minerals	2023	Channel samples	-	-	1,731	-	2.2%
		Chip samples	3	0.30		0.0%	
		Surface drilling	6	1,731		0.1%	
		Underground drilling	-	-		-	
Amaroq Minerals	2024	Channel samples	54	54	3,253	0.6%	4.2%
		Chip samples	253	86		2.7%	
		Surface drilling	11	2,986		0.1%	
		Underground drilling	2	127		-	

Nalunaq Sampling Campaigns Summary							
Supervising company	Phase	Sampling methods	No. of holes/ channels	Metreage	Total campaign metreage	Holes % of total	Campaign metres % of total
Amaroq Minerals	2025	Channel samples	-	-	165	-	0.2%
		Chip samples	16	23		0.2%	
		Surface drilling	-	-		-	
		Underground drilling	2	142		-	
Totals by sample type		Channel samples	1,473	1,115		15.5%	1.4%
		Chip samples	7,474	5,709		78.5%	7.3%
		Surface drilling	336	65,082		3.5%	83.7%
		Underground drilling	241	5,841		2.5%	7.5%
GRAND TOTAL			9,524	77,747		100.0%	100.0%

14.2.1 Database Adjustments

Minor adjustments to the database provided were discussed with Amaroq and approved prior to assessing top cutting or domaining. Minor changes include:

- Minor input data edits such as adjusting sample length that exceeded maximum depth, overlapping coordinate data and adding maximum depth where it was missing from logged data.
- Samples returning results below detection were set to half of the LOD, 0.0005 g/t.
- Exclusion of drillholes where no assay data is available:
 - Excluded holes IDs: T300-03, T300-04, NQ92, NQ94, NQ95, NQ98, B024, B043, B044, B045, B046, B048, B051, B052, B055, B056, AEX2241, AEX2243, NAL-UG-2404, NAL-UG-2502.

14.3 Geological and Mineralisation Modelling

All geological wireframe models of the Nalunaq Project and used in this estimate were produced by Amaroq and reviewed by Bara. Any minor adjustments or settings changes were discussed with Amaroq and edited within the as-received Leapfrog project.

The geological wireframes provided to Bara by Amaroq for estimation were included within a geological model in Leapfrog where individual volumes for granite, Main Vein and 75 Vein were provided. Fault structures are modelled as faults within the geological model, as well as provided as polylines for reference.

Once a re-sampling campaign of the 75 Vein was completed in October 2024, an updated 75 Vein wireframe was also provided, intended for grade estimation of the assays that intersected this hangingwall structure.

14.3.1 Lithological Domains

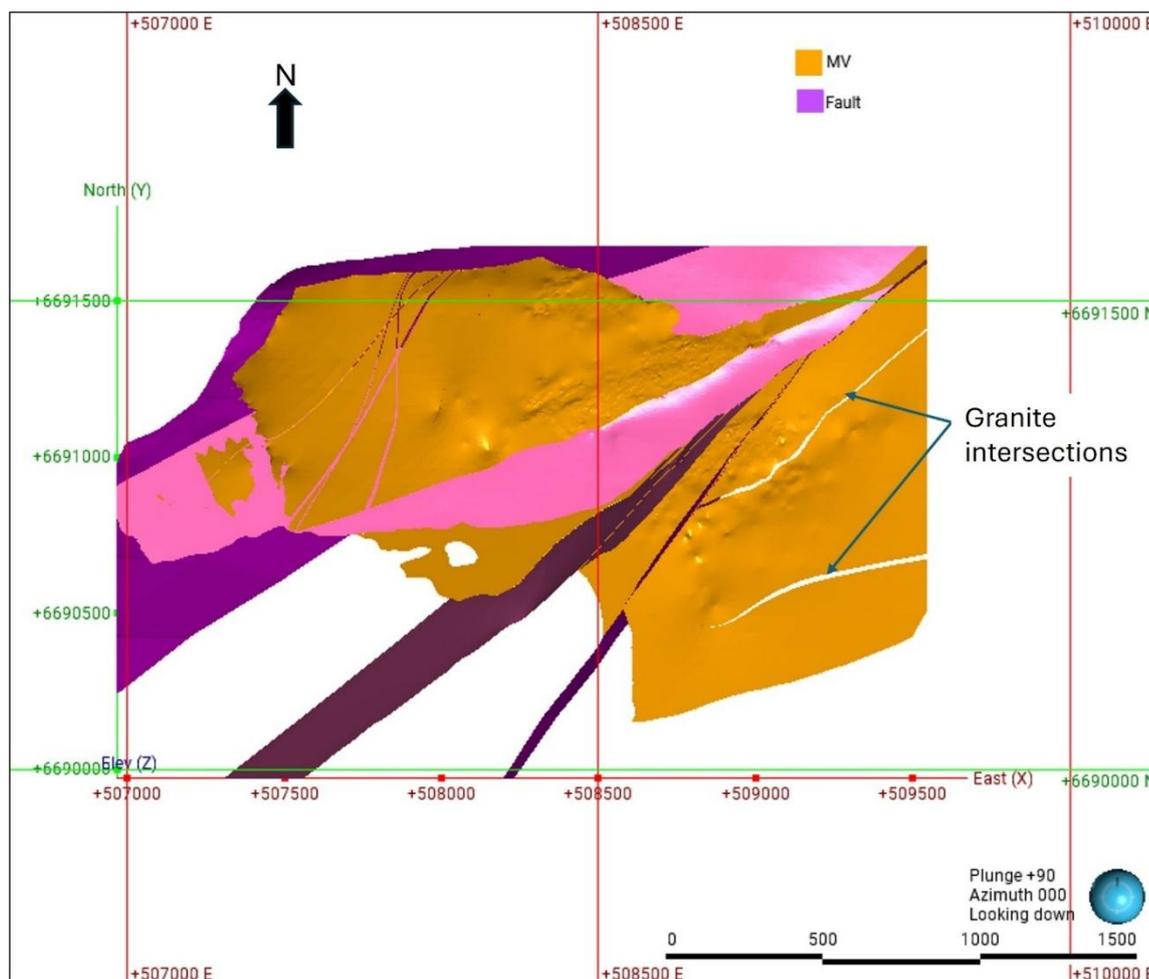
Geological wireframes have been prepared for the Main Vein which is cut by faults and granite dyke structures. The 75 Vein wireframe has also been provided. This structure was previously identified as a hanging-wall structure c. 75 m above the Main Vein with additional samples obtained from previously drilled core during the 2024 field season used to update the wireframe. At this stage of sampling, any tonnage from 75 Vein informs part of the exploration target at Nalunaq only and not the classified Resource.

The Main Vein wireframe has been created in Leapfrog Geo using semi-implicit modelling. The veins are based on samples which have been flagged as Main Vein with a minimum vein width of 0.6 m, where

there is no sample data. The minimum vein width is based on geologists' observations underground as well as from drill core.

The shape of the Main Vein in Figure 14-1 shows the modelled vein closely matching the underground LiDAR (light detection and ranging) survey, combined with knowledge of the vein morphology from drilling, sampling underground as well as mountain surface mapping and sampling and satellite imagery. The Main Vein wireframe is cut by faults (some filled with granitic/pegmatitic material), constructed from drilling and mapping data, dissecting the whole wireframe into sections which are combined together within the geological model for a single volume.

Figure 14-1 Nalunaq Main Vein wireframe (orange) cut by intersecting faults (purple) and a granitic dyke



Source: Amaroq

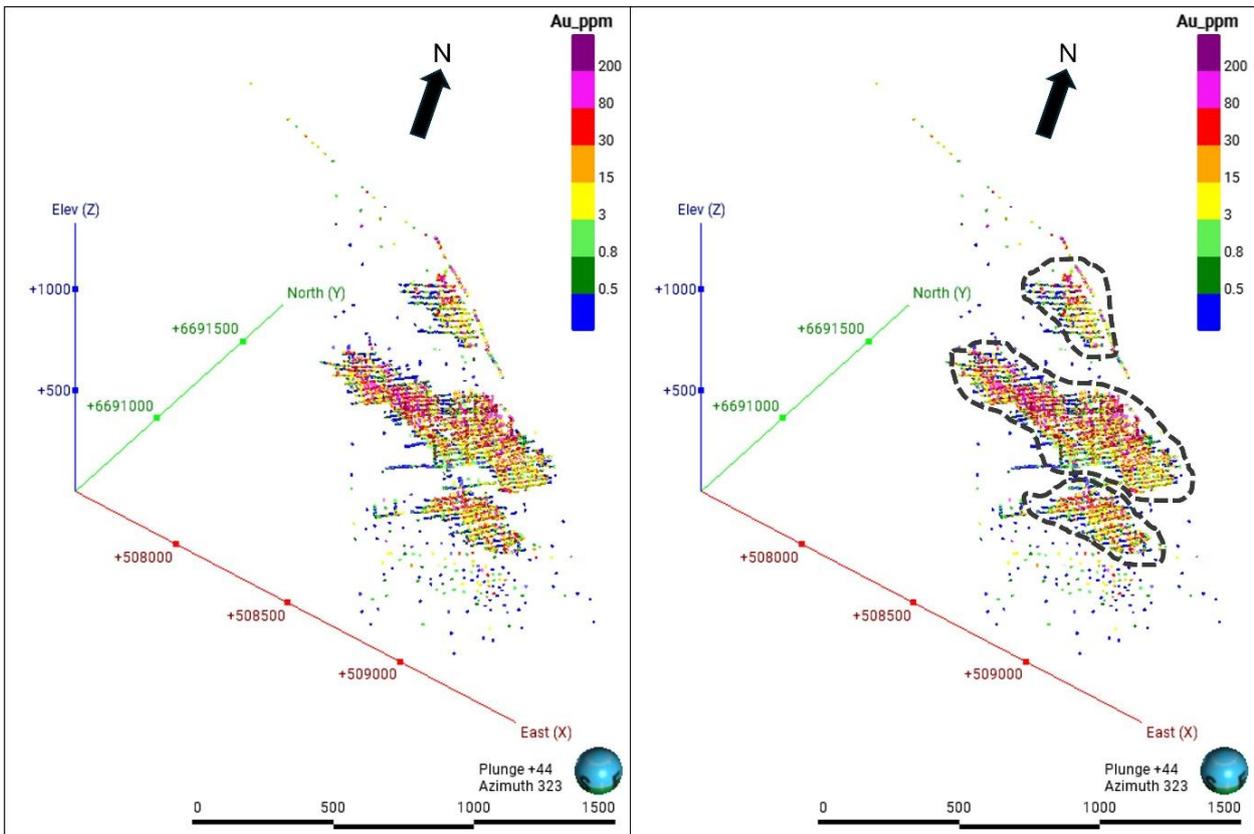
14.3.2 Estimation Domains

Within the Main Vein structure, sample populations based on grade were assessed in order to sub-domain and better represent the high-grade and low-grade gold distributions in an estimation. Visually, data spacing and grade distributions indicate preliminary areas for domain grouping (Figure 14-2).

Preliminary sub-domains as suggested in Figure 14-2 by the density of sample data, were then assessed in a more quantitative manner with grade shells and contours based on gold ranges. A shell of 5 g/t Au was chosen as a boundary for inclusion within high-grade domains based on grade distribution.

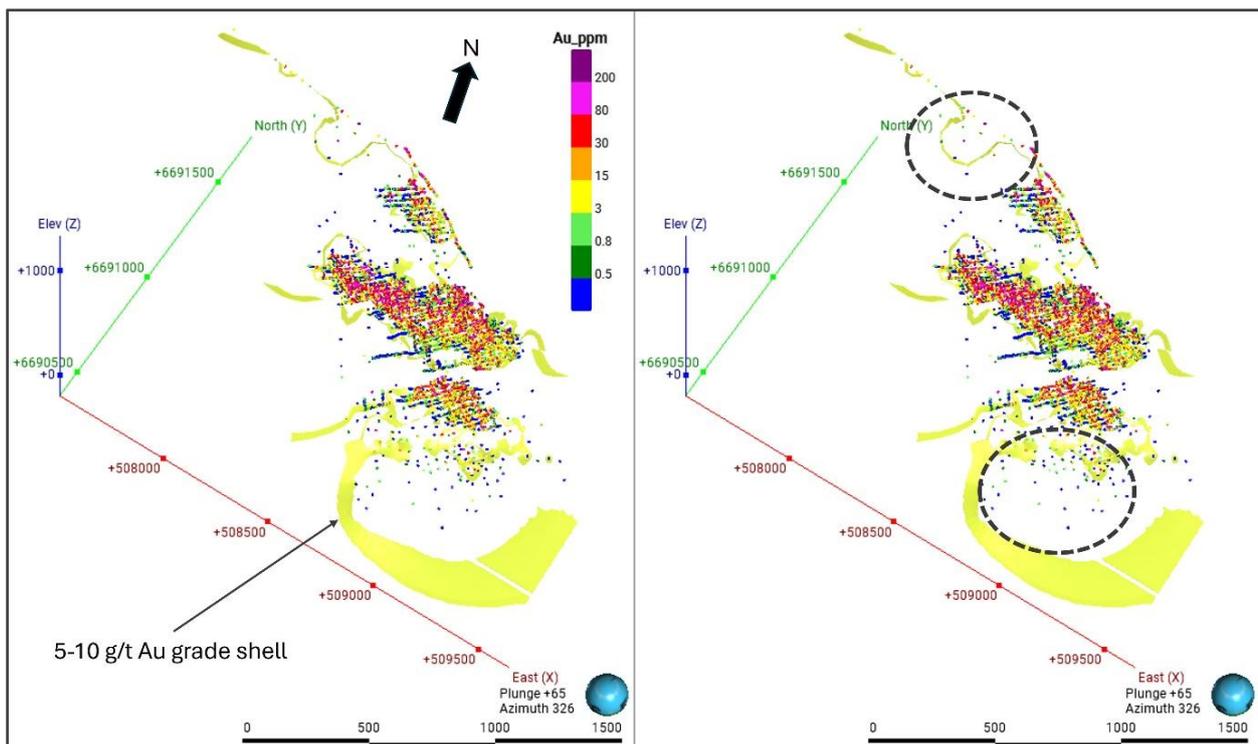
Figure 14-3 shows the 5–10 g/t Au grade shell, which supports the preliminary visual domains outlined above, and further suggests the dashed line domains as additional high-grade domains within upper Mountain Block and lower Valley Block.

Figure 14-2 Left image shows the distribution of intercepts with Main Vein; right image shows dashed lines, preliminary outlining sub-domains based on the density of sampling data



Source: Amaroq

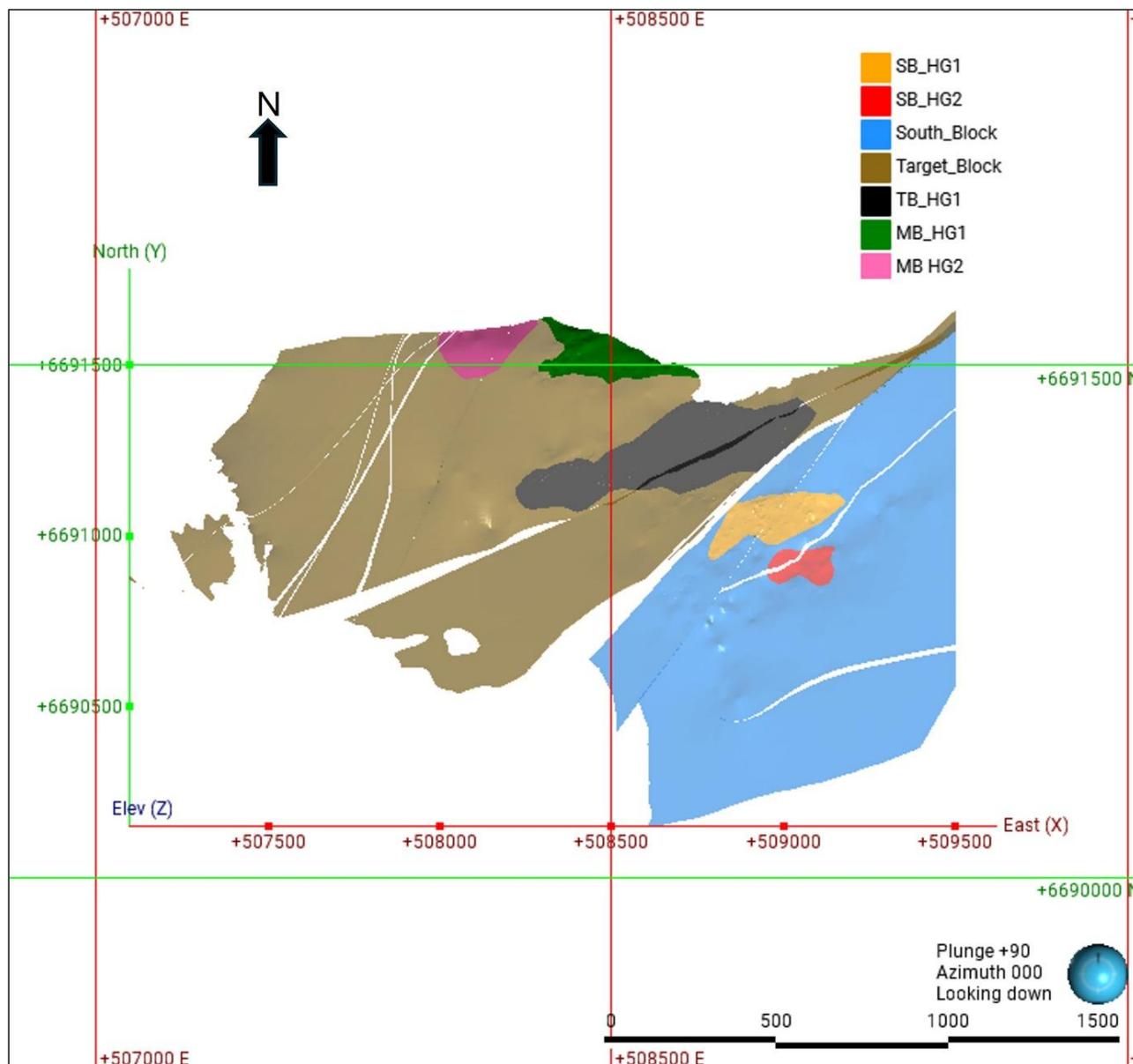
Figure 14-3 Left image shows the 5–10 g/t Au grade shell; right shows dashed areas where additional high-grade domaining is suggested by inclusion within this shell



Source: Amaroq

The high-grade sub-domains as well as the low-grade domains are summarised in Figure 14-4. South Block and Target Block are considered low grade domains. They are made up of the remainder of the Main Vein wireframe after the exclusion of the high-grade domains.

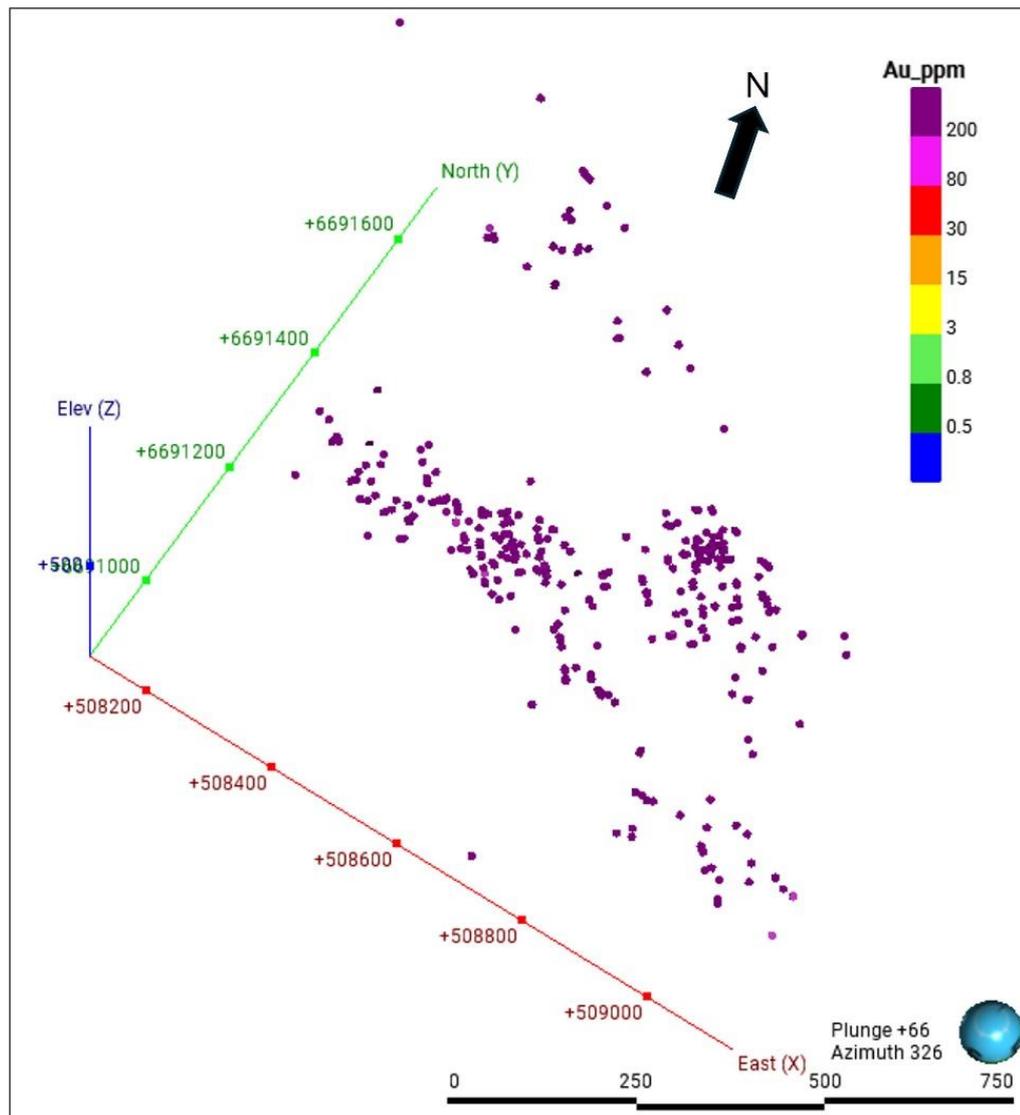
Figure 14-4 Plan view of Main Vein estimation domains



Source: Amaroq

The distribution of ultra-high grade samples c. >50 g/t Au, was explored with a similar grade contour approach. Samples >50 g/t supported the high-grade domains as detailed above. Furthermore, a similar support for these domains was seen for samples >200 g/t (Figure 14-5). Ultra high-grade samples are not sufficiently constrained to warrant an independent approach to domaining and rather were then considered as inclusion within high-grade domains, however, their influence will be controlled within the estimation.

Figure 14-5 MV samples > 200 g/t Au



Source: Amaroq

14.4 Statistical Analysis

14.4.1 Summary Statistics

Summary statistics for each of the estimation domains are shown in Table 14-3.

Table 14-3 Summary statistics for estimation domains

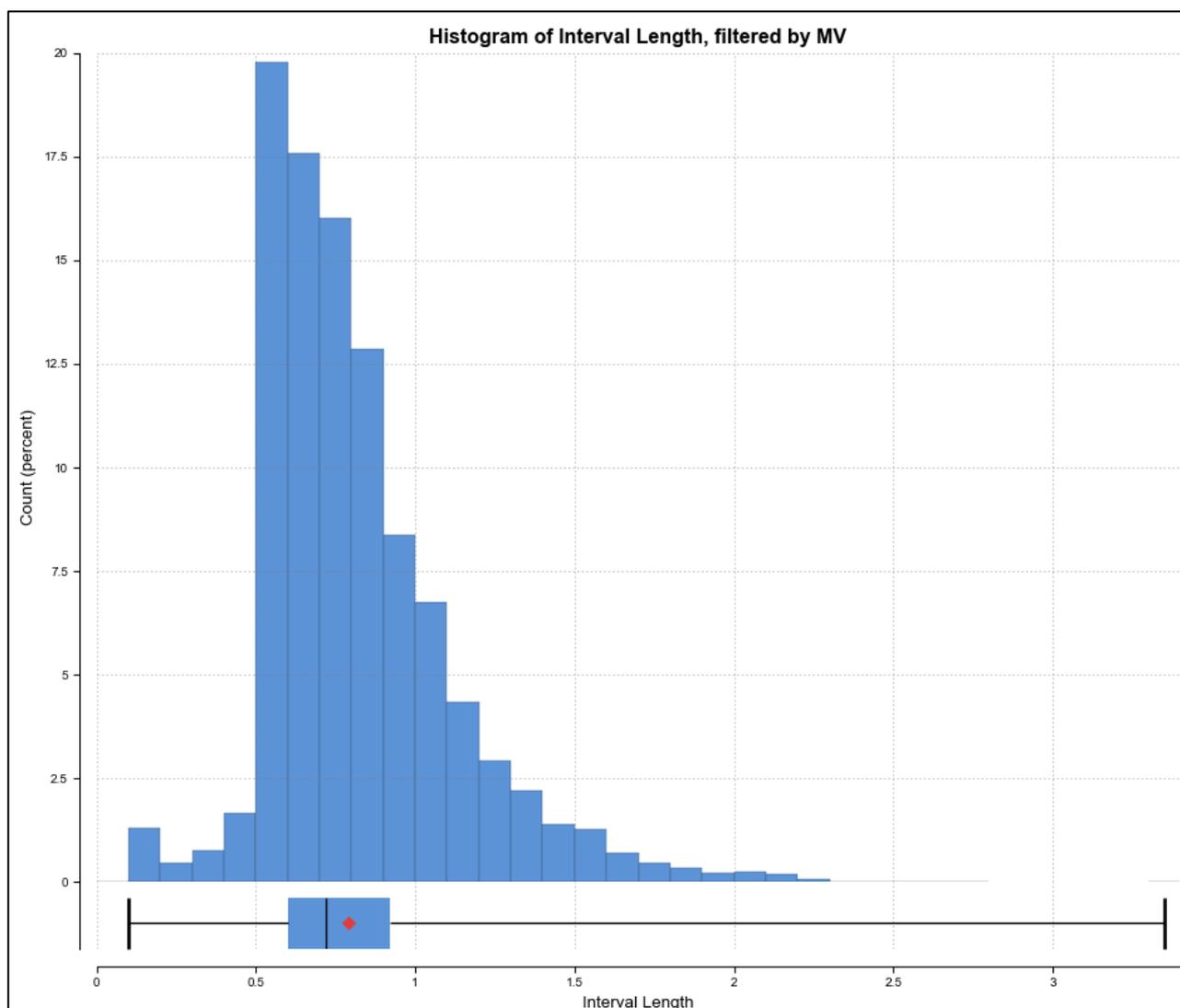
Domain	Count	Mean (Au g/t)	SD	Coefficient of variation	Minimum (Au g/t)	Maximum (Au g/t)
MB HG1	1,091	38.5	170.2	4.4	0.001	3,777.0
MB HG2	11	50.5	87.0	1.7	0.9	246.1
SB HG1	1,239	33.7	66.9	2.0	0.001	917.4
SB HG2	36	9.5	18.6	2.0	0.08	120.4
TB HG1	4,847	55.3	124.4	2.3	0.001	2,935.8
Target Block	907	8.7	63.0	7.3	0.0005	1,177.7
South Block	428	3.6	17.6	4.9	0.0005	232.6

14.4.2 Compositing

Prior to estimation, samples within domains are composited to ensure equal sample support and avoid a biased model. This can be done using the average or modal sample length and adjusting all samples accordingly to this length. However, sampling of the Nalunaq vein has generally been a single sample per interval to cover the full vein thickness, often at a minimum of 0.5 m, especially for diamond drill core due to minimum sample mass for fire assay analysis. Figure 14-6 shows the percentage of samples within sample length ranges.

Therefore, compositing across the full thickness of the vein was deemed most appropriate.

Figure 14-6 Raw sample lengths for samples intersecting Main Vein



Source: Amaroq

The compositing has resulted in a sample reduction (of those intersecting Main Vein) from 8,563 to 8,494 meaning a 0.8% reduction in the number of samples.

14.4.3 Domain Statistics

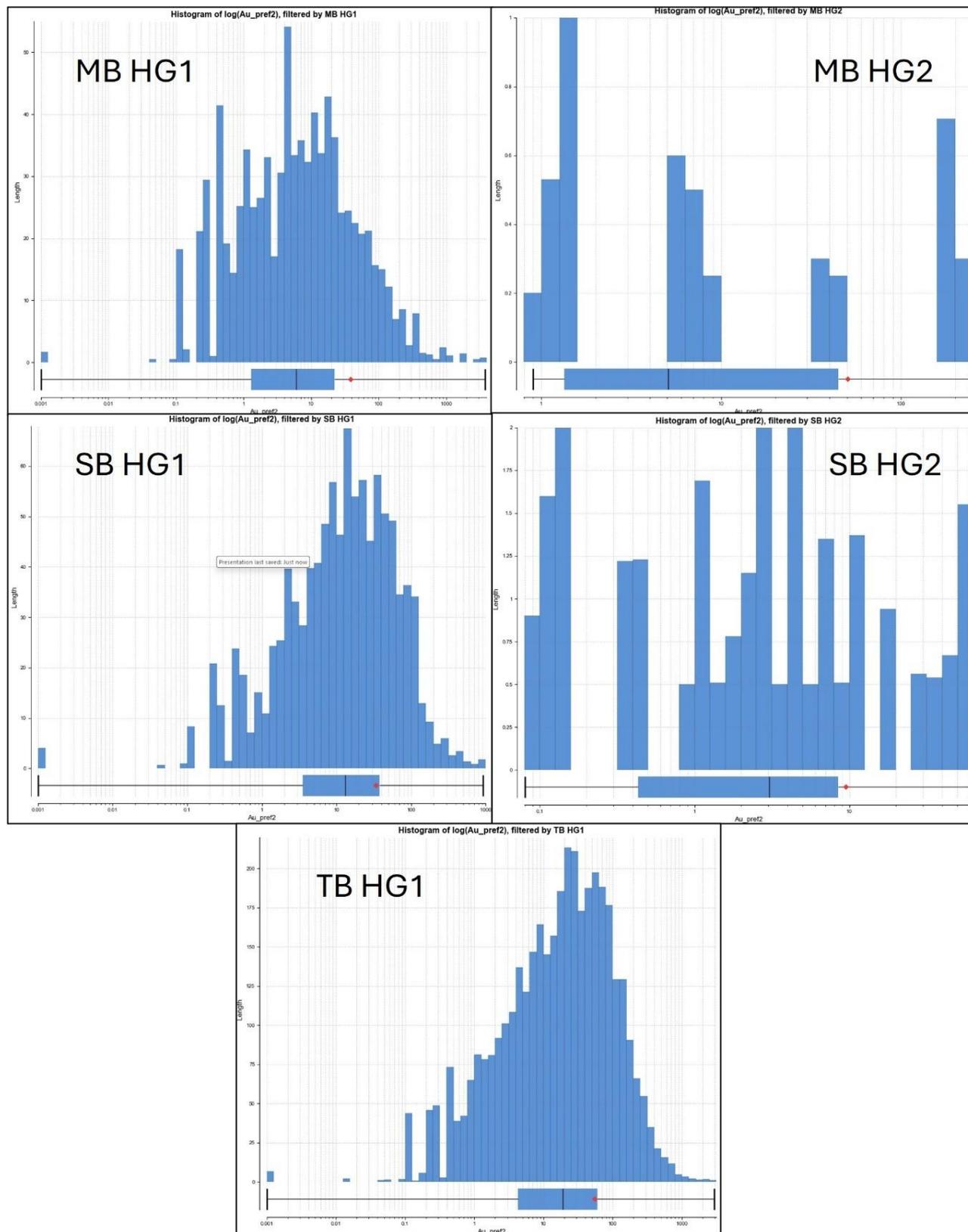
Summary statistics for composited data from within the estimation domains are shown in Table 14-4. Compositing has not altered the mean gold grade per domain and very minor changes only to SD and coefficient of variation (CV).

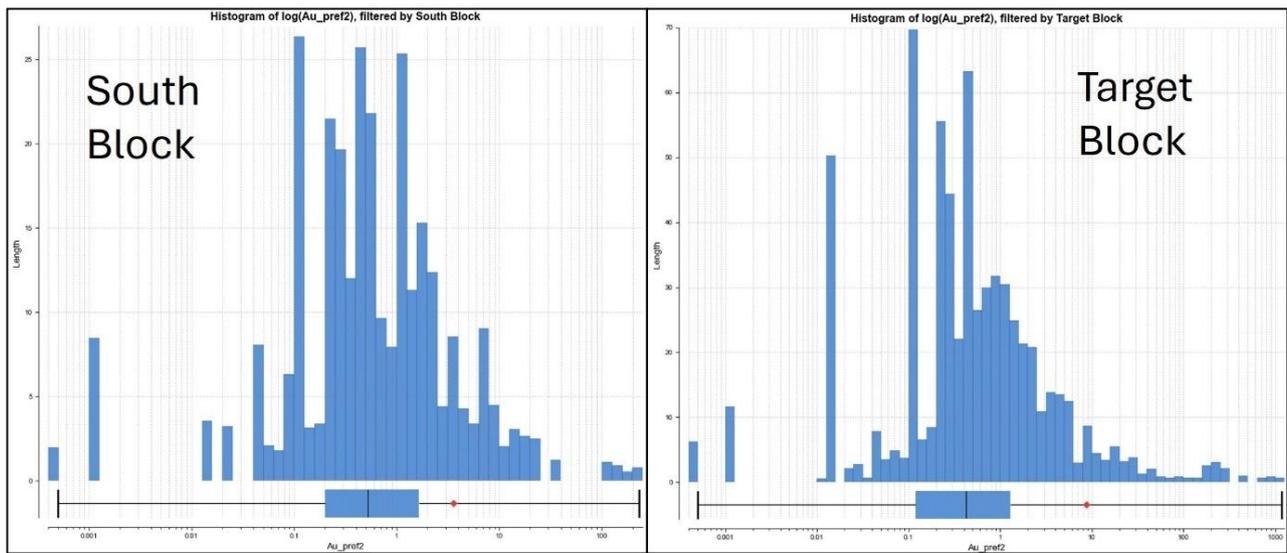
Table 14-4 Summary statistics for composited samples per domain

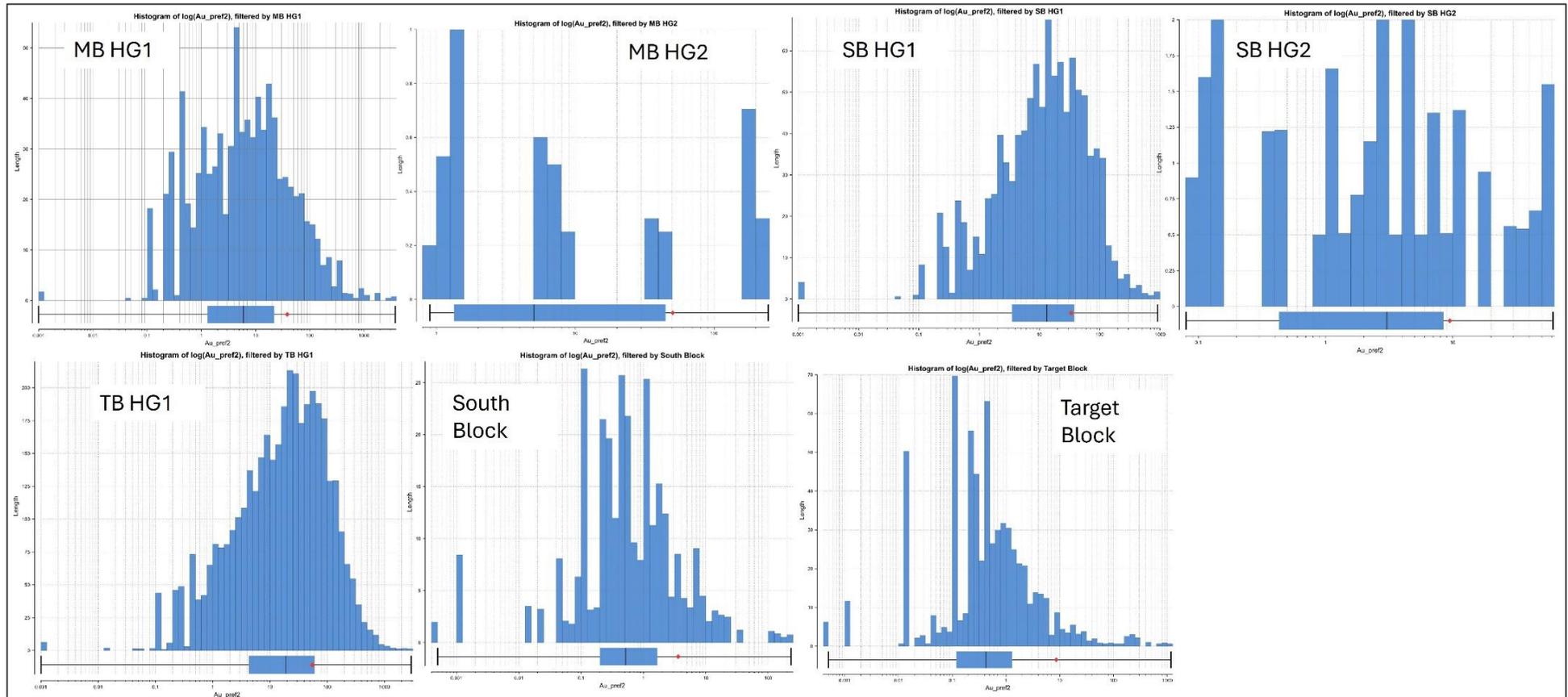
Domain	Composited				Un-composited			% Difference (between means)	% Difference (between SDs)	% Difference (between CVs)
	Count	Mean (Au g/t)	SD	CV	Mean (Au g/t)	SD	CV			
MB HG1	1,091	38.5	170.20	4.40	38.5	170.23	4.42	0.00%	-0.02%	-0.52%
MB HG2	11	50.5	87.00	1.70	50.5	86.95	1.72	0.00%	0.06%	-1.27%
SB HG1	1,239	33.7	66.70	2.00	33.7	66.87	1.98	0.00%	-0.25%	0.77%
SB HG2	36	9.5	16.40	1.70	9.5	18.57	1.96	0.00%	-13.25%	-15.25%
TB HG1	4,847	55.3	123.90	2.20	55.3	124.38	2.25	0.00%	-0.39%	-2.15%
Target Block	907	8.7	62.90	7.30	8.7	62.97	7.28	0.00%	-0.11%	0.25%
South Block	428	3.6	17.60	4.90	3.6	17.61	4.91	0.00%	-0.08%	-0.19%

Log-histograms of composite sample gold grade per domain can be seen in Figure 14-7.

Figure 14-7 Histograms per domain of sample composites (log Au g/t is on the X-axis with length in 10 m increments on the Y-axis)







Source: Amaroq

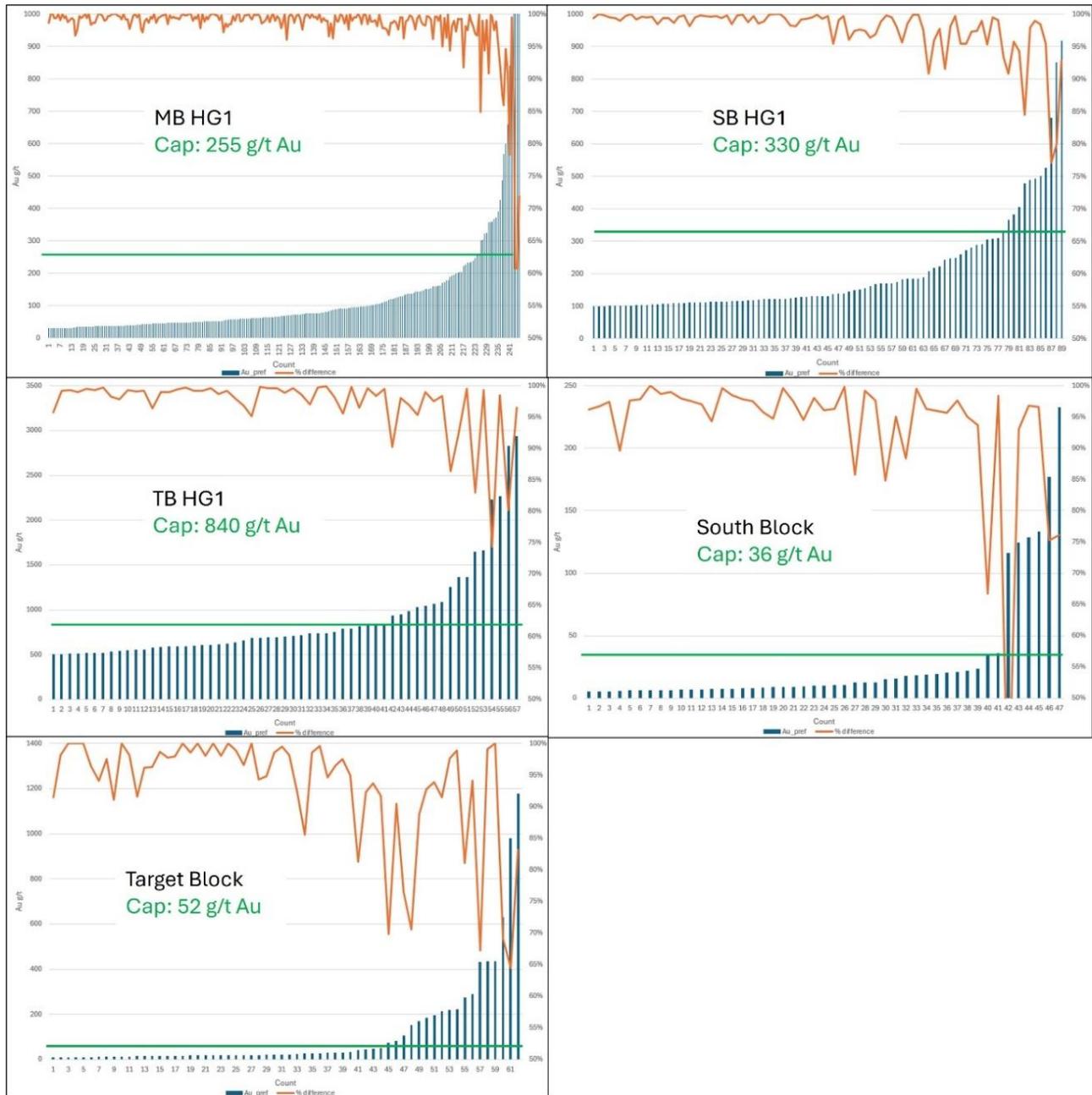
14.5 High-Grade Outliers – Capping

Due to the prevalence of coarse gold in the deposit as discussed, there are numerous high and ultra-high grades (>100 g/t Au) within the deposit. This presents challenges in estimation as unlike many “nuggety” gold deposits where coarse gold is a rare occurrence and skews the sample dataset, at Nalunaq these values are relatively common and as such need to be honoured as such. Therefore, whilst valid in showing the variability within the vein, their influence on an estimation needs to be managed to prevent bias. Therefore, high grades have been assessed per domain and capped accordingly.

Given this coarse gold grade component of the deposit, significant effort was undertaken into determining the top-cutting approach at Nalunaq. A preliminary assessment was initially undertaken per domain with histogram plots and cumulative frequency graphs. This was then followed by an iterative process through estimation of selected top cut values to determine the visual impact of grade distribution, as well as the impact on domain mean estimated grades. During block model validation, swath plots from all domains were assessed and any occasions where modelled grades were higher than mean sample composited grades, top cutting alongside other estimation parameters were reviewed.

Final selected capped grades are shown in Figure 14-8.

Figure 14-8 Capped values per domain for Nalunaq Main Vein estimation using cumulative plots



Source: Amaroq

A “clamp” value is also applied during the estimation as a “second pass” of the high-grade samples to further control the spread of these higher values. This will be discussed in Section 14.5.1 (Grade Clamping).

Summary statistics for the capped vs uncapped gold grades can be seen in Table 14-5.

Table 14-5 Summary statistics for composites grades per domain and comparison with mean gold grade with uncapped values per domain

Domain	Capped value (Au g/t)	Uncapped			Capped			% Difference (between means)	% Difference (between SDs)	% Difference (between CVs)
		Mean (Au g/t)	SD	CV	Mean (Au g/t)	SD	CV			
MB HG1	255	38.5	170.2	4.4	26.5	51.8	2.0	-45.3%	-228.5%	-120.0%
MB HG2	Uncapped	50.5	87.0	1.7	50.5	87	1.7	0.0%	0.1%	0.0%
SB HG1	330	33.7	66.7	2.0	31.7	50.9	1.6	-6.3%	-31.1%	-25.0%
SB HG2	Uncapped	9.5	16.4	1.7	9.5	16.4	1.7	0.0%	0.2%	0.0%
TB HG1	840	55.3	123.9	2.2	53.7	97.5	1.8	-3.0%	-27.1%	-22.2%
Target Block	36	8.7	62.9	7.3	2.9	8.7	3.00	-200.0%	-622.9%	-143.3%
South Block	52	3.6	17.6	4.9	2.2	5.4	2.4	-63.6%	-225.2%	-104.2%

Whilst Table 14-5 suggests the mean for Target Block, South Block and MB HG1 are noticeably different between the capped and uncapped mean gold grades, it should be noted that the CV has generally reduced to values deemed more appropriate for a representative estimate. Iterations of estimation visually support the top cuts as better representations of grade distribution as well as swath validations for varying scenarios of top cutting.

It is noted that the CV values for the Target Block and South Block remain high after capping and are above what would be considered a more appropriate threshold of 2.0, despite these actually representing the two lower-grade domains within the estimate. This may be considered counter-intuitive initially, especially as capping values utilised for these domains are circa an order of magnitude lower than the high-grade domains. However, it is a representation of the sample dataset in that while the higher-grade domains have a very high-grade population, this is also somewhat “normal” due to the high-grade nature of mineralisation at Nalunaq, and so unlike a “traditional” nuggety gold deposit where the normal tenor of mineralisation may be significantly lower and very high grade results are more infrequent, this is not the case at Nalunaq. Conversely, while efforts have been made to generate domains that honour the higher-grade and lower-grade portions of the deposit there are sporadic higher grades present within the low-grade domains that cause these areas to behave in a more “nuggety” manner than the higher-grade domains as these values are less typical and therefore give rise to the higher CV values in these domains.

14.5.1 Grade Clamping

In addition to top capping, in order to manage the influence of very high-grade samples in the estimate, a secondary restriction was placed on grades referred to as “clamping” across all estimation domains. A distance and clamping value (i.e. gold grade) were selected (per search pass, per estimation), to control and restrict higher grades within all domains where sub-domaining was not possible or appropriate.

This technique enables additional capping to be applied once the distance between the high-grade sample and the block centroid exceeds the distance designated. These restrictions allowed localised and short range, high-grade samples to be represented in the estimation, while preventing high-grade smearing into other areas. This approach enables internal high-grade variations in gold grade within the vein to be honoured without their undue influence within potentially lower-grade areas.

The distance and grade restriction parameters for the clamping were developed iteratively with scenarios tested through to estimation of incremental changes in the clamping distances and gold grades applied. Visual validation and block model statistics were compared between domains and globally for each of the scenarios estimated before final, appropriate parameters were selected. The grade values chosen to be applied for clamping were initially identified by the same methodology as the top cut values, i.e. through log-probability and grade population analysis per domain, discussed previously.

Table 14-6 shows the clamping distances and grade applied to each domain. The distance is calculated based on a percentage of the long axis of each search pass, in order for the search range to equal 10 m. The 10 m clamping distance was designated as an appropriate distance to limit higher grades as the range for soft boundary estimation as well as X-axis and Y-axis block size and has gone through an iterative process of visual validation.

Table 14-6 Clamping distance per estimation domain

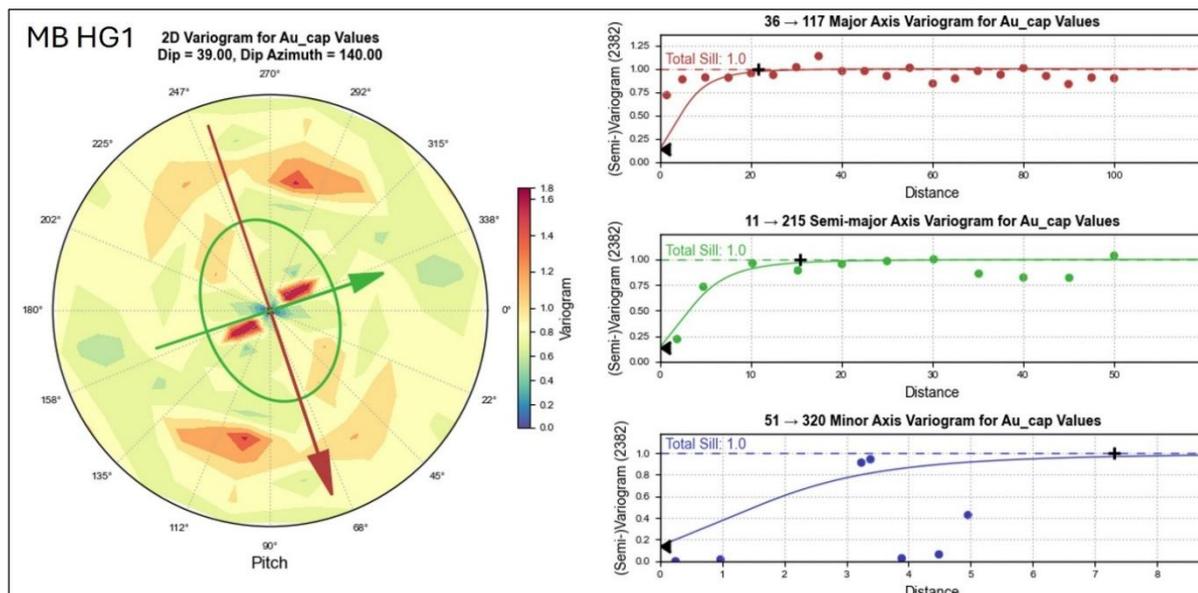
Mineralisation domain	Clamping value (Au g/t)	Clamping distance (m)
MB_HG1	175	10
MB_HG2	175	10
SB_HG1	190	10
SB_HG2	50	10
TB_HG1	790	10
South Block	36	10
Target Block	52	10

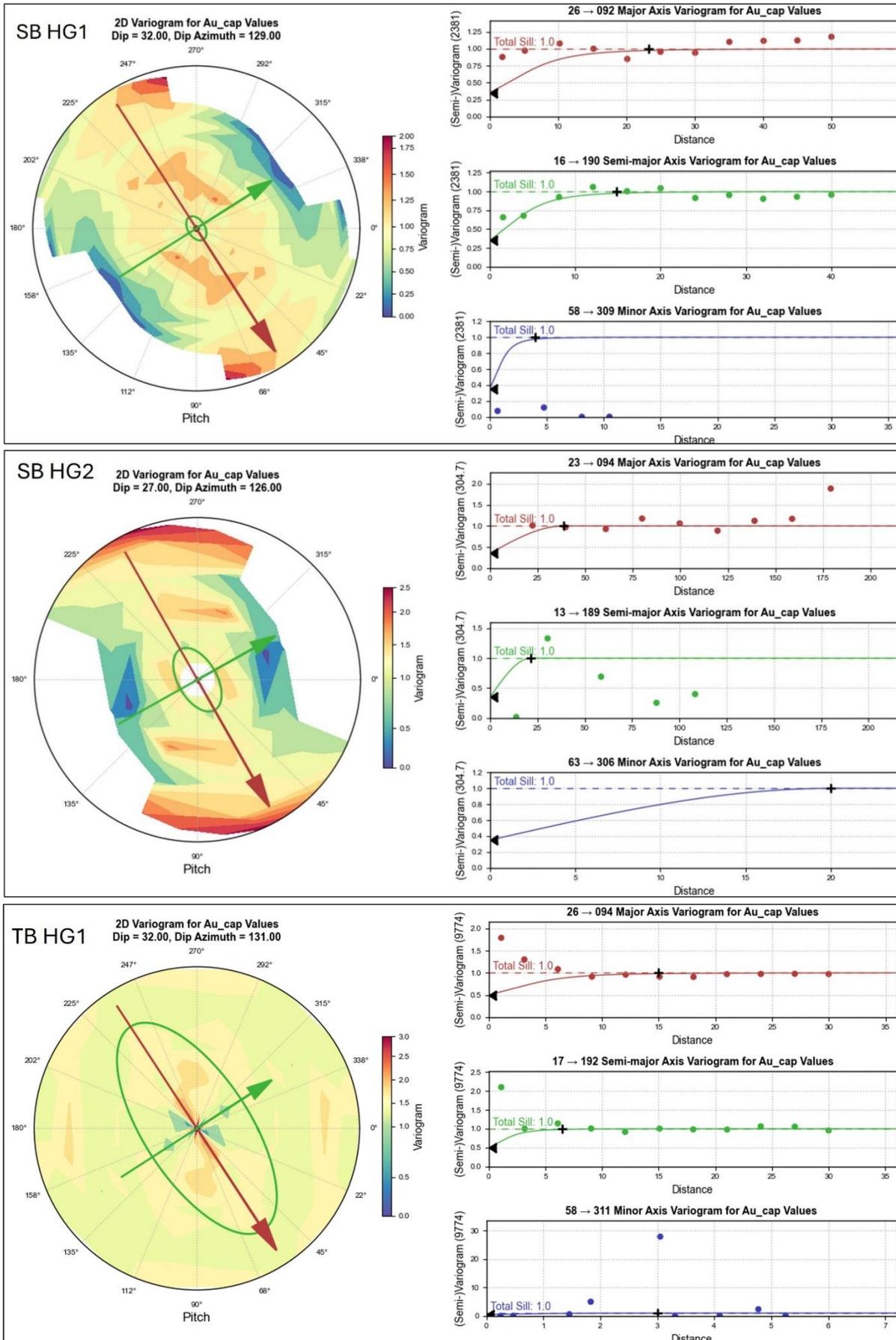
14.6 Geostatistical Analysis

Variography was undertaken within Leapfrog Geo (with Edge estimation extension), in order to assess the geostatistical grade continuity between samples within estimation domains. The high-grade domains, MB HG1, MB HG2, TB HG1, SB HG1 and SB HG2 were selected as deemed to have adequate sample support to produce robust variograms for estimation by ordinary kriging (OK). However, it became apparent during variography analysis and subsequent estimation scenario runs that there are not enough samples within MB HG2 to undertake meaningful statistical analysis to support variography and therefore it was decided to estimate this domain utilising by inverse distance cubed (ID3) methodology, akin to the low-grade domains.

Variograms are constructed in Leapfrog aligning the axis of the variograms to the dominant known trend of the Main Vein orientation. Radial plots indicate the robustness of the variogram axis orientation which is assigned accordingly. Major, semi-major and minor axis variogram models are fitted to experimental variograms, then adjusted based on suitable lag distances to get experimental variogram ranges, sill (normalised) and nugget (normalised). Radial plots and experimental variograms are shown in Figure 14-9.

Figure 14-9 Experimental variograms and radial plots for high-grade domains with adequate samples for analysis





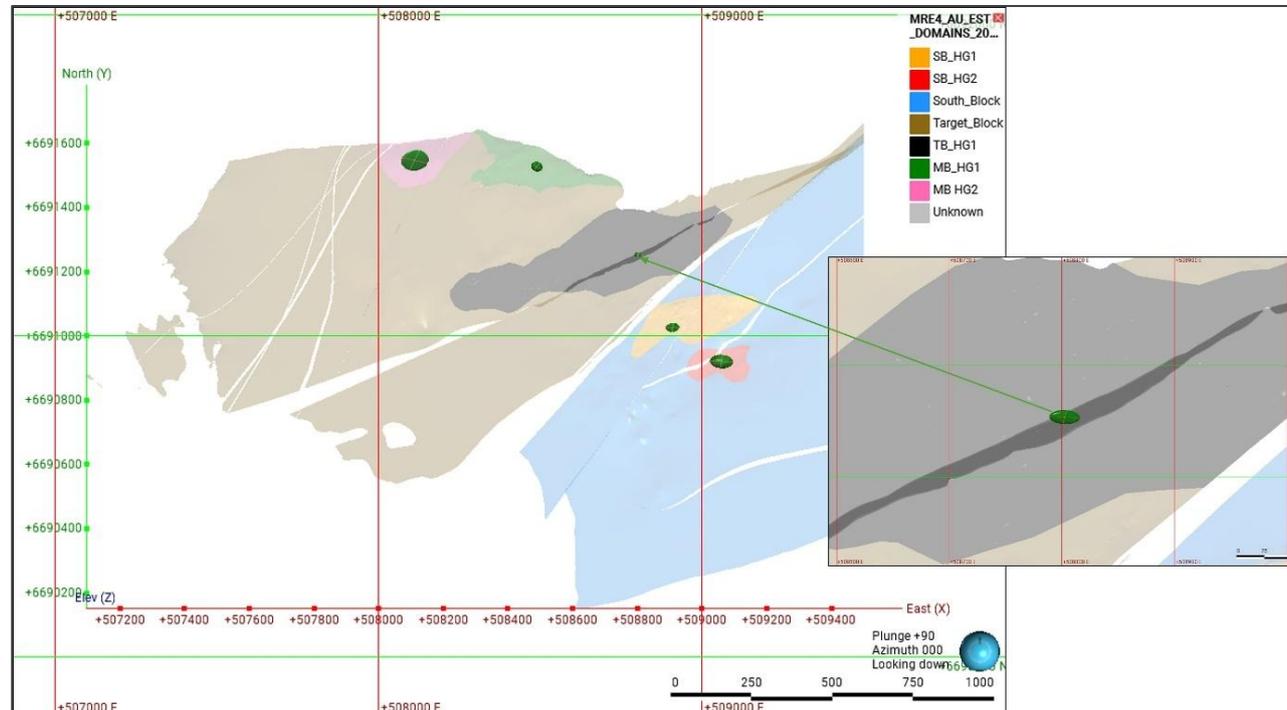
Source: Amaroq

Variography was carried out on capped, composited values per domain (Au_cap). A summary table of the values from variograms is shown in Table 14-7 and their relative size and shape for all domains is shown in Figure 14-10. It was observed that these variogram orientations and dimensions visually aligned well with the second order plunge observed to control higher-grade mineralisation within the domains and so are believed to be accurate reflections of the controls on mineralisation within the deposit.

Table 14-7 Summary of variogram parameters per domain

Domain	MB_HG1	SB_HG1	SB_HG2	TB_HG1
Normalised nugget	0.14	0.35	0.35	0.50
Dip (°)	39	32	27	32
Variogram trend				
Dip direction (°)	140	129	126	131
Pitch (°)	72	58	61	57
Structure 1				
Model	Spheroidal (Alpha3)			
Normalised sill	0.86	0.65	0.65	0.50
Major (m)	22	23	39	15
Semi-major (m)	15	15	21	7
Minor (m)	7	4	20	3

Figure 14-10 Estimation domains and variogram model ellipses (enlarged image to the right shows TB HG1 variogram)



Source: Amaroq

14.7 Block Model Definition

A block model was created for the Nalunaq deposit based on the WGS84 UTM Zone 23N grid and covering an area to include all modelled mineralised zones. The geometry and extents of the block model are summarised in Table 14-8. Parent block dimensions are 10 m (X) x 10 m (Y) x 5 m (Z) and are

sub-blocked to 0.625 m x 0.625 m x 0.3125 m (octree sub-blocking by divisor of 16). No rotation was applied to the block model.

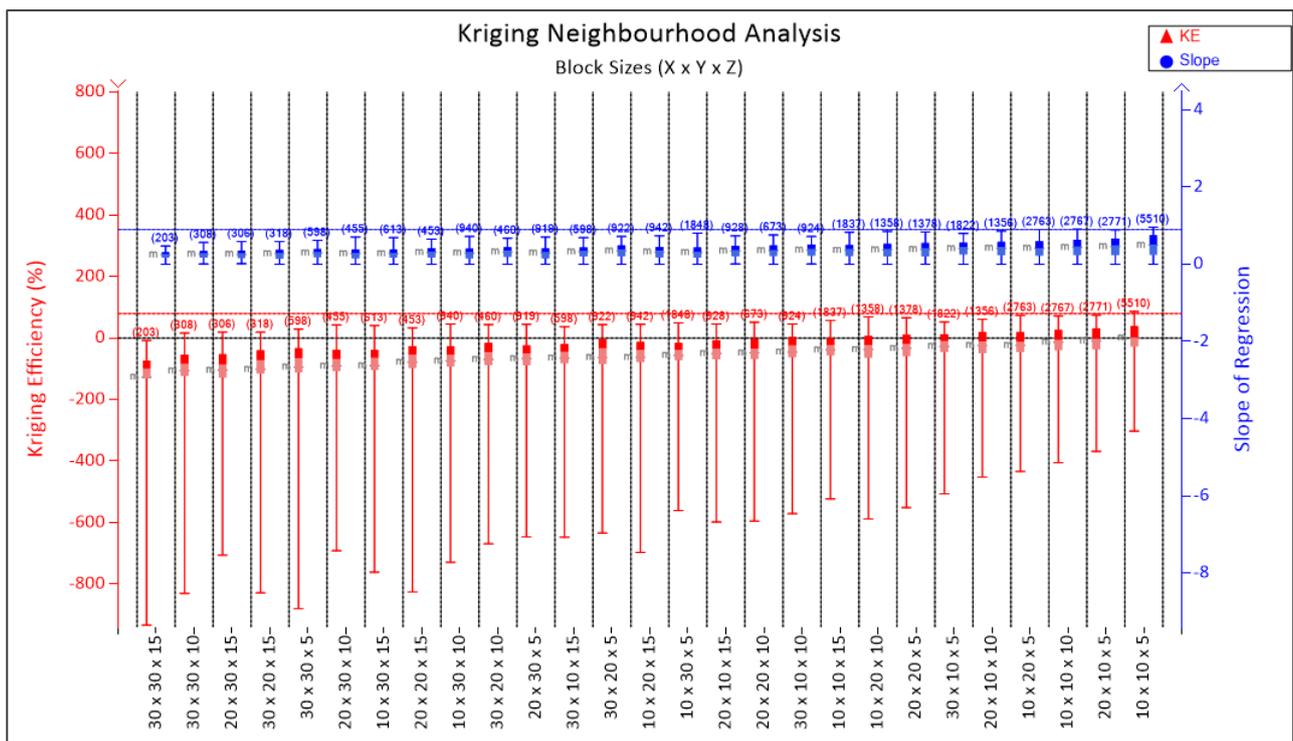
Table 14-8 Block model parameters summary

Direction	Origin (WGS84 UTM Zone 23N)	Block size (m)	Boundary length (m)	No. of blocks	Minimum sub-block size (m)
X	507660	10	2,000	200	0.625
Y	6690300	10	1,600	160	0.625
Z	1350	5	1,500	300	0.3125

The block size selected is consistent with the dimensions used in the previous Mineral Resource update (MRE3, September 2022). It reflects short-range grade distribution, and it is deemed suitable for the estimation that uses closely spaced production samples (2–5 m spacing) as well as more disparate sample spacing (i.e. surface drilling c. 15–60 m spacings) without over-smoothing of the estimate.

The block size (along with other estimation parameters), was also run through KNA in Snowden Supervisor which shows very little variation in kriging efficiency and slope within each domain on block sizes from 5 m to 30 m. Block sizes per domain and globally were assessed; an example is shown in Figure 14-11.

Figure 14-11 KNA showing block size iterations – ordered by kriging efficiency for TB_HG1



Source: Amaroq

The parent block size of 10 x 10 x 5 (X, Y, Z) had the highest kriging efficiency for TB HG1 (chosen as contains the most densely spaced data), as shown in Figure 14-11 to further supports its use for estimation.

Minimum and maximum sample numbers were also tried and tested using KNA in Supervisor to support those used in the final estimation and outlined in Table 14-10.

14.8 Grade Estimation Parameters

14.8.1 Estimation Strategy – Estimation Methods

Populations of gold grades have been assessed through the domaining process as outlined previously. Main Vein was split into five high-grade and two low-grade domains. The chosen estimation technique was decided upon for each domain after an iterative process of comparing ordinary kriging (OK), inverse distance cubed (ID3), inverse distance squared (ID2) and nearest neighbour (NN), to the composited sample values and the continuity and variance of the estimation. OK was chosen as the best representation of gold grades for high-grade domains, SB HG1, SB HG2 and TB HG1, alongside ID3 for MB HG2 (high-grade), South Block and Target Block (low-grade domains). Due to the more disparate nature of samples within MB HG2, although high-grade, the ID3 estimation method better represented the grade distribution, compared to OK. All estimates were carried out on composited samples, composited to the width of Main Vein within the estimation domains with ID2 and NN estimates estimated to be used to compare to the OK results for validation purposes.

14.8.2 Boundary Analysis

Previous estimates had used hard boundaries to the estimation domains which resulted in stark grade contrasts at the margins that were not believed to be geologically representative of the nature of mineralisation. This view was supported by observations of the mineralisation underground during the site visit, and as such it was decided to investigate the use of soft domain boundaries to the estimate. Therefore, hard and soft boundaries were estimated for comparison on all domains, and comparative statistics were analysed, i.e. mean gold grade, SD and variance, as well as the visual distribution of estimated grades compared to composited sample grades. It was observed that a soft boundary successfully limited high-grade blocks being in contact with very low-grade blocks and was seen to better represent the continuity of grade along the vein, rather than the harsh boundaries used previously which were effectively an anthropogenic artefact generated by the choice of domain extents and not necessarily strictly a geological feature. Analysis comparing hard boundaries and soft boundaries with multiple ranges tested (i.e. 5 m, 10 m or 15 m) and illustrated that a soft boundary with a 10 m range was the best representation of grade distribution.

14.8.3 Search Ellipses

Search ellipse passes were guided by ranges determined by variography analysis. The orientation of the searches matched the variogram orientations. Where possible, first search pass distances were equal to or closely guided by variogram ranges in the major, semi-major and minor orientation for high-grade domains. However, through several iterations of estimation using search pass distances for each domain, slight variations on ellipse distances were developed to maximise the most efficient estimation. Table 14-9 summarises the variogram ranges to search radius parameters. Note: MB HG2 was ultimately estimated by ID3 but variography ranges were assessed as a guide for search parameters.

Table 14-9 Estimation pass dimension for estimation domains

Domain	Estimation technique	Variogram ranges	Search pass 1 dimensions	Search pass 2 dimensions	Search pass 3 dimensions
MB HG1	OK	22 x 15 x 7	30 x 15 x 10	60 x 30 x 20	120 x 60 x 30
MB HG2	ID3	50 x 38 x 10	50 x 40 x 10	100 x 80 x 20	200 x 160 x 80
SB_HG1	OK	23 x 15 x 4	30 x 15 x 10	90 x 60 x 30	300 x 120 x 60
SB_HG2	OK	39 x 21 x 20	40 x 20 x 20	100 x 50 x 50	160 x 80 x 80
TB_HG1	OK	15 x 7 x 3	15 x 10 x 10	30 x 20 x 20	120 x 60 x 60
South Block	ID3	N/A	60 x 30 x 30	120 x 60 x 60	240 x 120 x 120
Target Block	ID3	N/A	60 x 30 x 30	120 x 60 x 60	500 x 250 x 250

A second search pass was estimated generally using dimensions double that of the first pass with the aim of estimating the remaining blocks within the domains after the first initial search pass. A third pass was estimated generally using dimensions double that of the second pass to infill and ensure no gaps in the estimation.

Quadrant search restrictions were also applied to high-grade domains, dictating the maximum number of samples per sector and how many sectors can have no samples in. This was carried out to prevent smearing of high-grade samples, especially in areas where there are closer spaced high-grade samples, i.e. production data.

The selected estimation parameters are presented in Table 14-10.

Table 14-10 Estimation parameters

		TB_HG1	SB_HG1	SB_HG2	MB_HG1	MB_HG2	South Block	Target Block
Interpolation technique		Ordinary kriging				Inverse distance (power 3)		
Search pass 1	Search radius	15 x 10 x 10	50 x 20 x 10	35 x 35 x 20	20 x 15 x 10	50 x 40 x 10	60 x 30 x 30	60 x 30 x 30
	No. of samples minimum and maximum	8,32	8,32	6,24	8,32	1,20	8,20	8,20
	Sector search	Quadrant	Quadrant	Quadrant	Quadrant	-		
	Maximum per sector	8	8	8	8	-	-	-
	Maximum empty sectors	1	1	2	1	-	-	-
Search pass 2	Search radius	30 x 20 x 20	100 x 40 x 20	80 x 50 x 50	50 x 30 x 20	100 x 80 x 20	120 x 60 x 60	120 x 60 x 60
	No. of samples minimum and maximum	8, 32	8, 32	6,24	8, 32	1, 20	8, 20	8, 20
	Sector search	Quadrant	Quadrant	Quadrant	Quadrant	-	-	-
	Maximum per sector	8	8	8	8	-	-	-
	Maximum empty sector	1	1	2	3	-	-	-
Search pass 3	Search radius	120 x 60 x 60	300 x 120 x 60	100 x 75 x 75	100 x 60 x 30	-	240 x 120 x 120	240 x 180 x 180
	No. of samples minimum and maximum	8, 32	8,20	6,24	8,32	-	2,20	2,20
	Sector search	Quadrant	-	Quadrant	Quadrant	-	-	-
	Maximum per sector	8	-	8	8	-	-	-
	Maximum empty sector	2	-	2	3	-	-	-

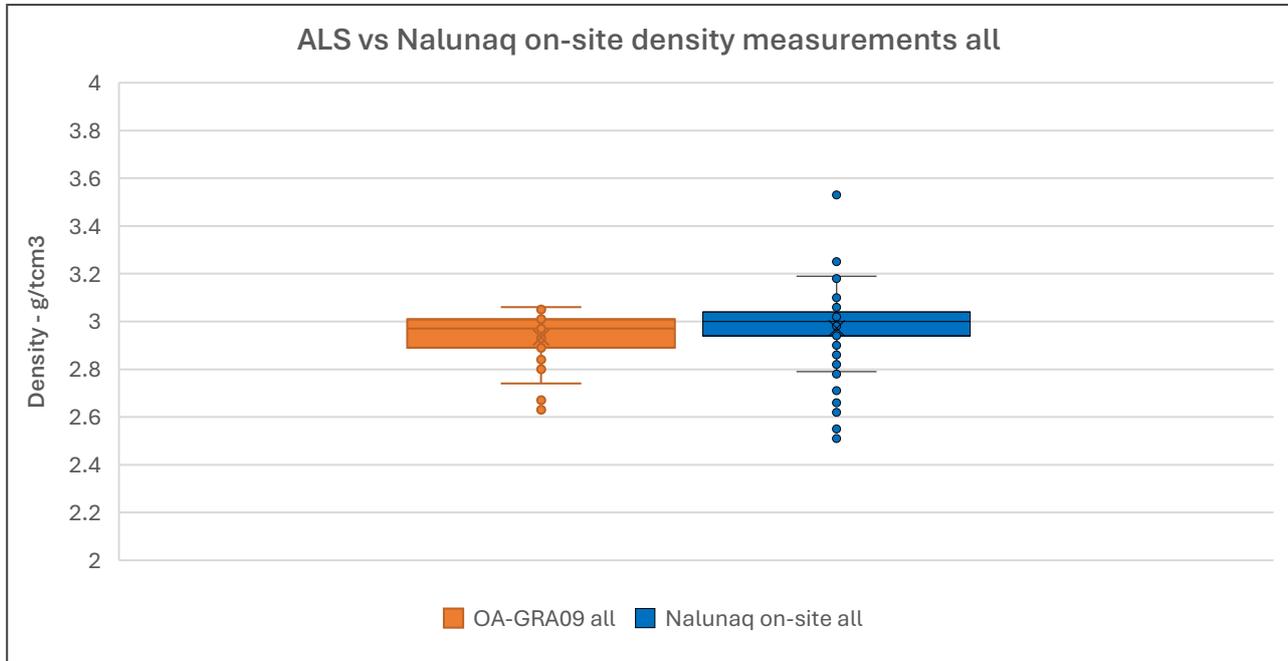
14.9 Tonnage Estimation

Bara received an initial database of 256 samples that had undergone density testwork. Of those, 192 were logged as “amphibolite” and 64 were flagged as “Main Vein”. Many of these were duplicate samples – with half-core and quarter-core field duplicate measurements for density being taken. A total of 208 samples therefore (removing the field duplicates) underwent density testwork, 39 by OA-GRA09 (bulk density by water displacement) at ALS laboratory, Loughrea, Ireland, and 169 by water displacement method on site at Nalunaq. All samples from this initial phase of testwork were taken

from 2021 diamond drill core, drilled within the valley block, representing the Main Vein and host rock associated with gold mineralisation, albeit spatially restricted.

A comparison between the samples from the 2021 campaign measured at ALS and Nalunaq indicates they are very similar (Figure 14-12), with an overall length weighted average of 2.96 g/cm³.

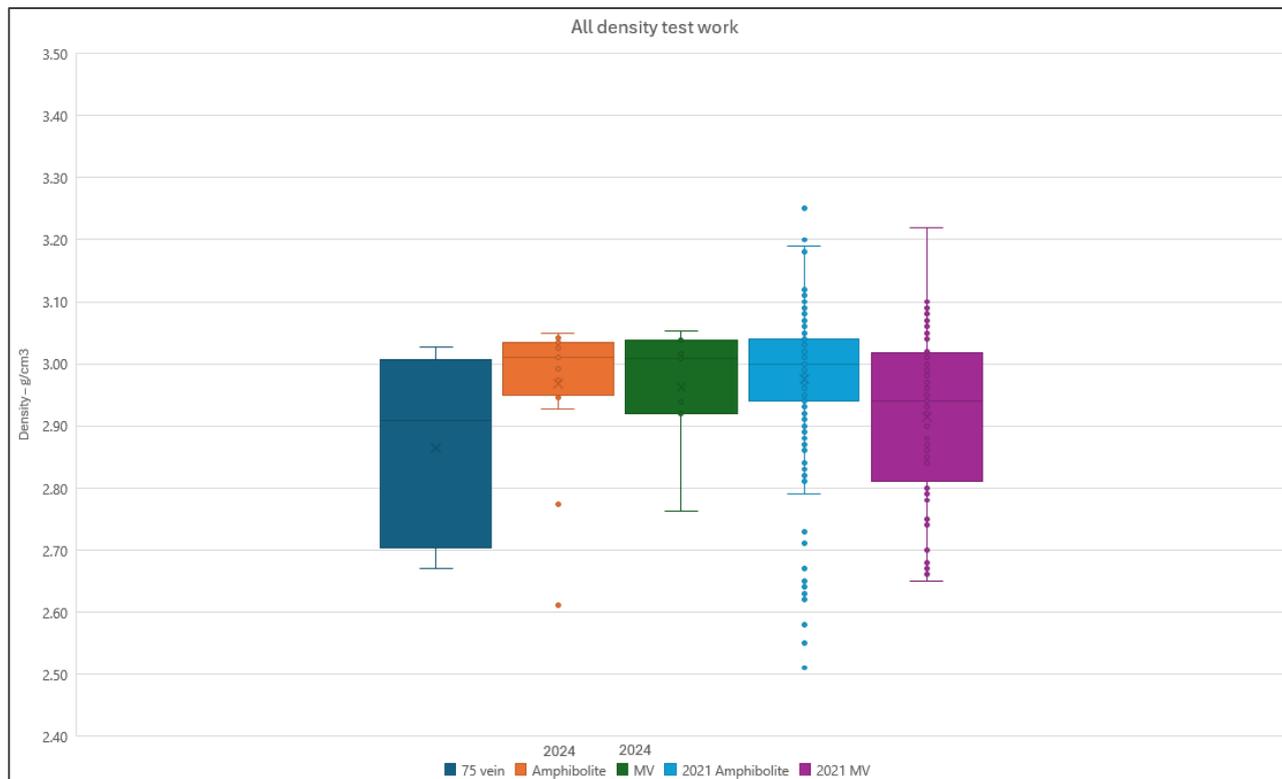
Figure 14-12 Comparison in density testwork results for ALS and Nalunaq on-site from the 2021 samples



Source: Amaroq

A further 33 samples were taken for density testwork during the 2024 field season. These included 7 samples of 75 Vein, 19 of amphibolite and 7 flagged as Main Vein, from 2023 diamond drill core. Figure 14-13 shows all density testwork samples and comparison between lithologies and campaigns. There is limited variance in average density values, largely because the generally thin width of the vein at Nalunaq means that samples reflecting mineralisation inevitably include a host rock component. As such the overall length-weighted average density remains at 2.96 g/cm³, therefore this has been selected as the density for the tonnage estimate of the Main Vein.

Figure 14-13 Comparison in density measurements for all testwork and the breakdown by as logged lithology



Source: Amaroq

14.10 Block Model Validation

14.10.1 Introduction

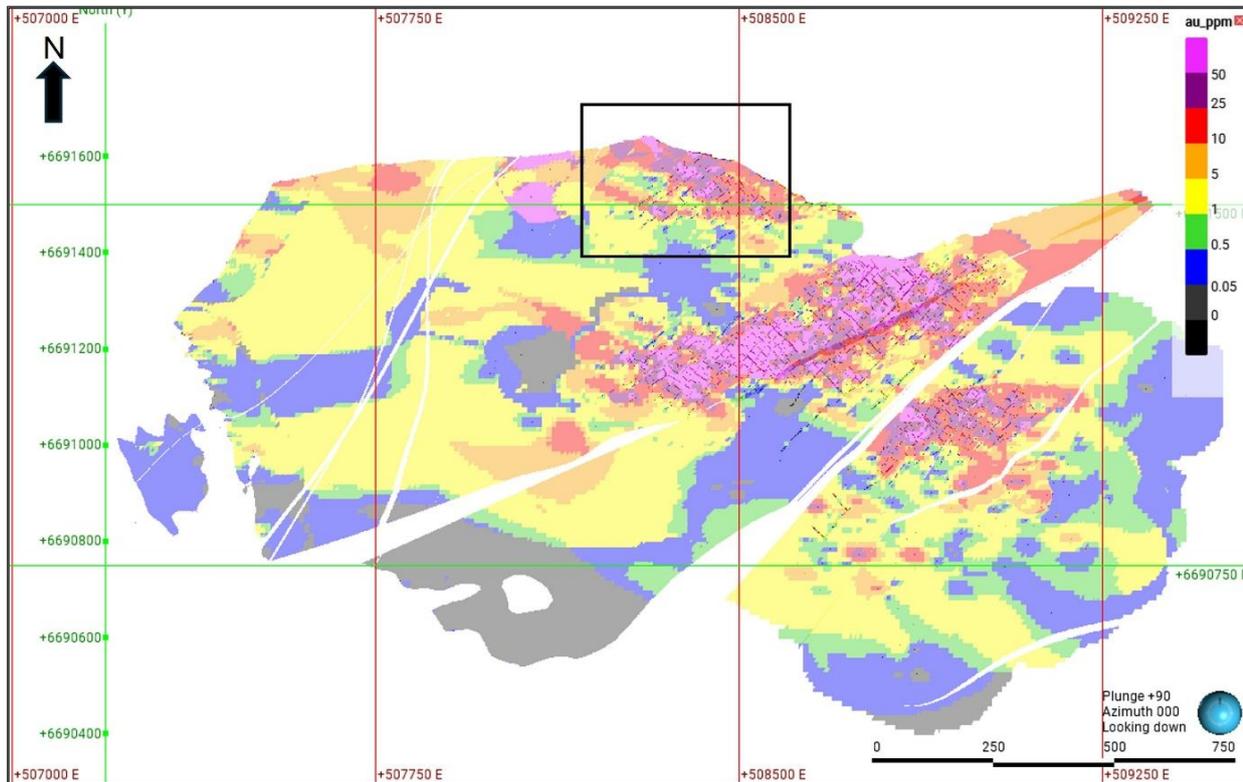
Bara has validated the results of the estimate through various methods such as:

- Visual validation – comparing block values to composited sample grades
- Swath plots
- Visual assessment of the proportion of each domain estimated in the first search pass
- Wireframe volume validation vs estimated volume.

14.10.2 Visual Validation

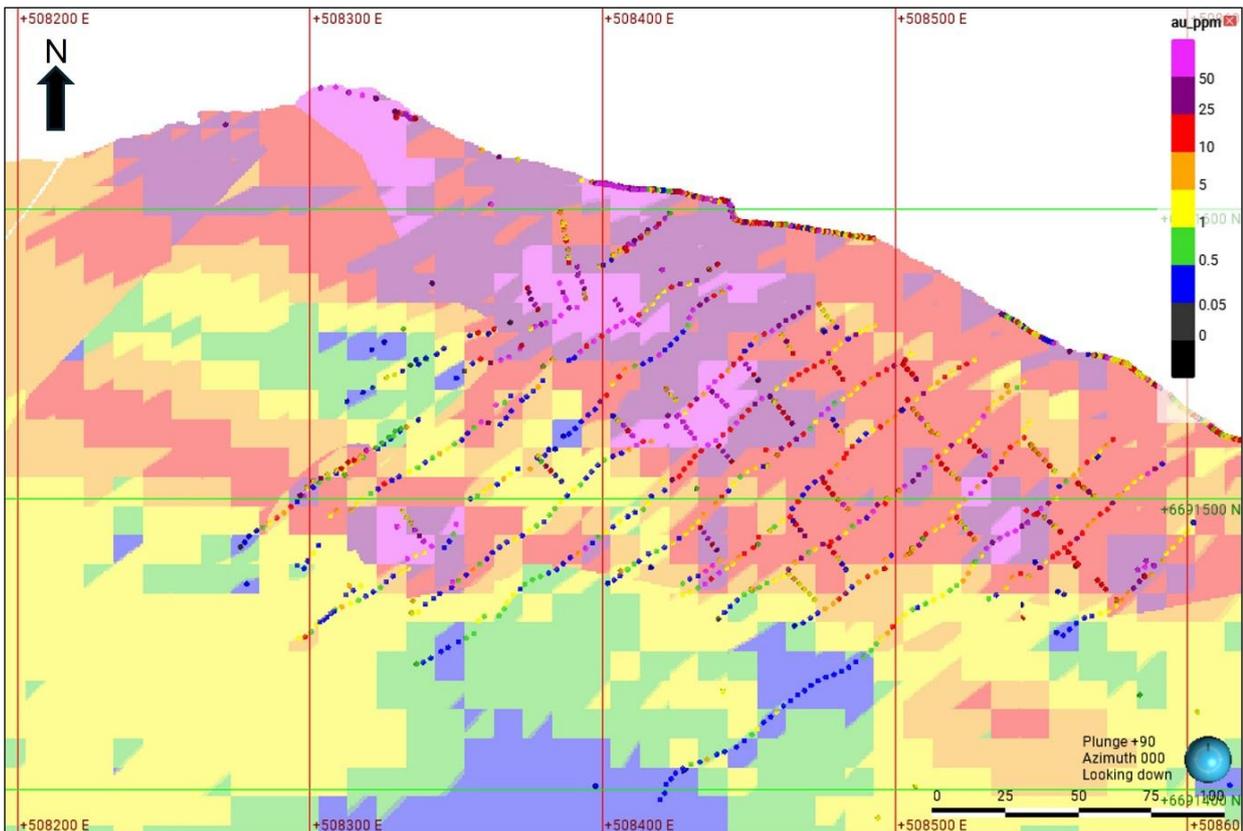
Visual validation was carried out at every stage of the estimation process, in particular when assessing scenarios based on variations in estimation parameters where the outputs from the estimation were consistently correlated with the composited sample grades to check the integrity of the model. When final parameters were decided upon and a model that best represents the grade distribution of the deposit was created, comparison with composited sample grades illustrated good correlation between block grades in high-grade and low-grade areas. An example is shown in Figure 14-14 and Figure 14-15, centred around MB HG1 and surrounding Target Block.

Figure 14-14 MRE4 model with inset square for zoomed in validation



Source: Amaroq

Figure 14-15 Comparison of composited gold grades against the block model estimated grades within high-grade domain – MB HG1



Source: Amaroq

14.10.3 Swath Plots

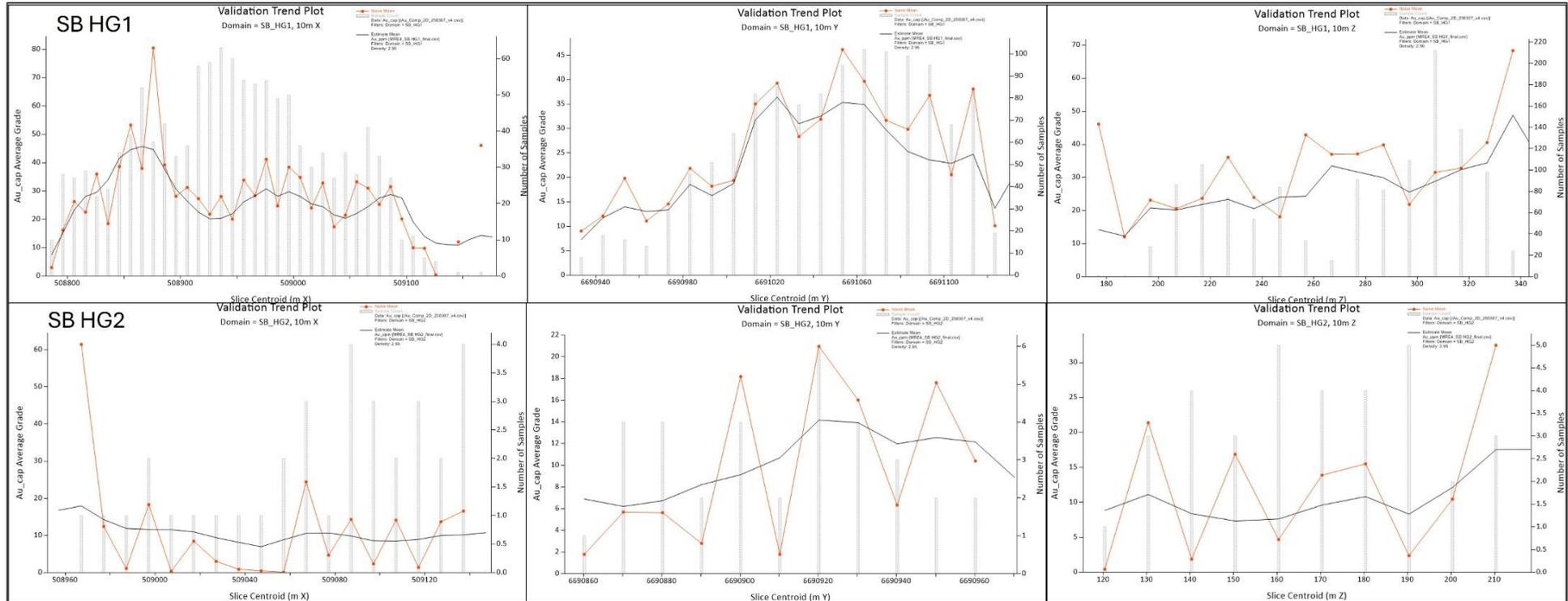
Swath plots were generated in Snowden Supervisor v.9 to compare average block model grades to the average capped composited grade. This is shown across each domain as 10 m slices in the X, Y and Z direction, comparing the final estimated model grade to the source input data assay.

The swath plots in Figure 14-16 and Figure 14-17 show the red line which is the average sample grade and the average block grade in red. Whilst there are “spikes” within the sample data, the overall trend of the estimate follows the sample trend and smooths out areas of variance within the composited samples, as expected from an estimate. Due to sparse sample data for MB HG2, the domain shows some deviation between sample and model grade but supported with visual validation this is not of concern as the overall smoothed model grade is far below the capped sample grade and this material is classified as Inferred. The swath plots show good validation of the model and Bara is satisfied with the estimate as a result.

Overall, whilst acceptable, the low-grade domains show greater disparity in swath plots between modelling and composited gold grade. This is largely due to the nugget effect being more pronounced in these areas with larger spacing between samples which is difficult to manage in the estimation without over-smoothing the grade. This is not considered to be a material factor for the estimate given that the low-grade domains are only classified as Inferred material and represent a small percentage of overall contained metal in the deposit.

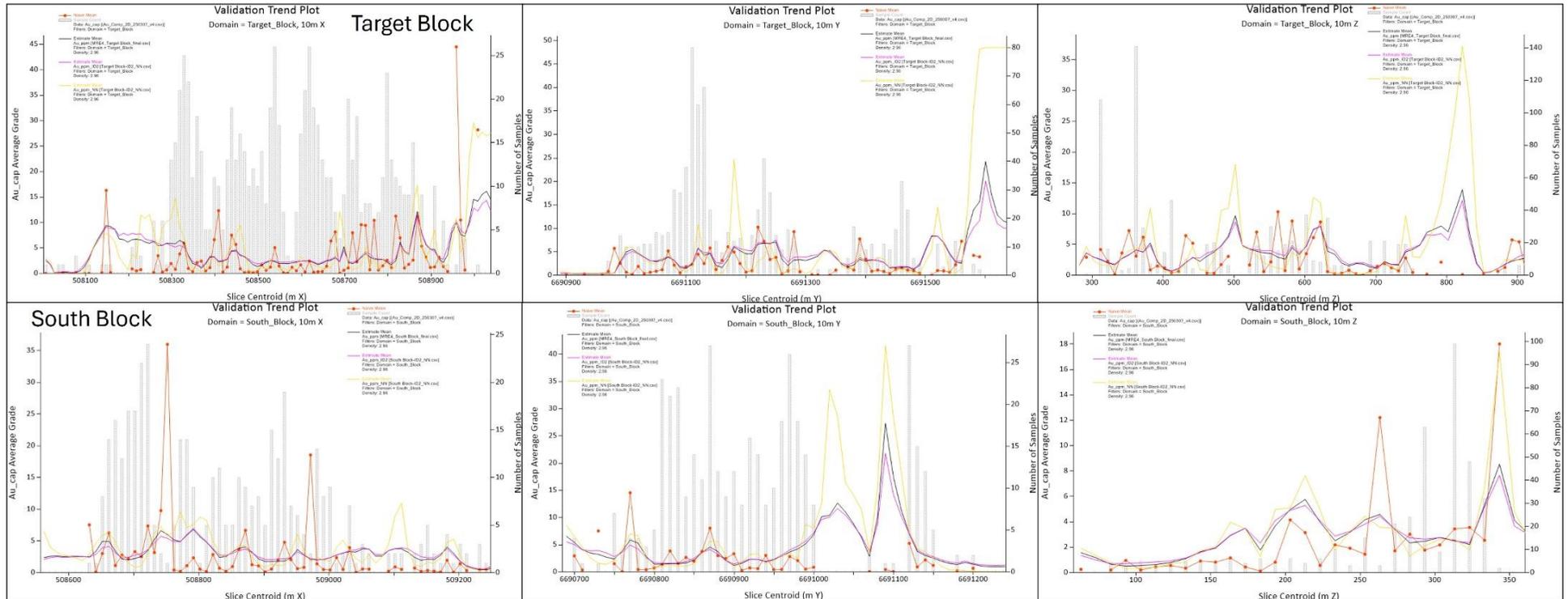
Low-grade swath plots shown in Figure 14-17 also have NN (yellow line) and ID2 (pink line) and support the use of ID3 as the low-grade estimation technique.

Figure 14-16 Swath plots of high-grade domains



Source: Amaroq

Figure 14-17 Swath plots of low-grade domains



Source: Amaroq

14.10.4 Mine Reconciliation Data

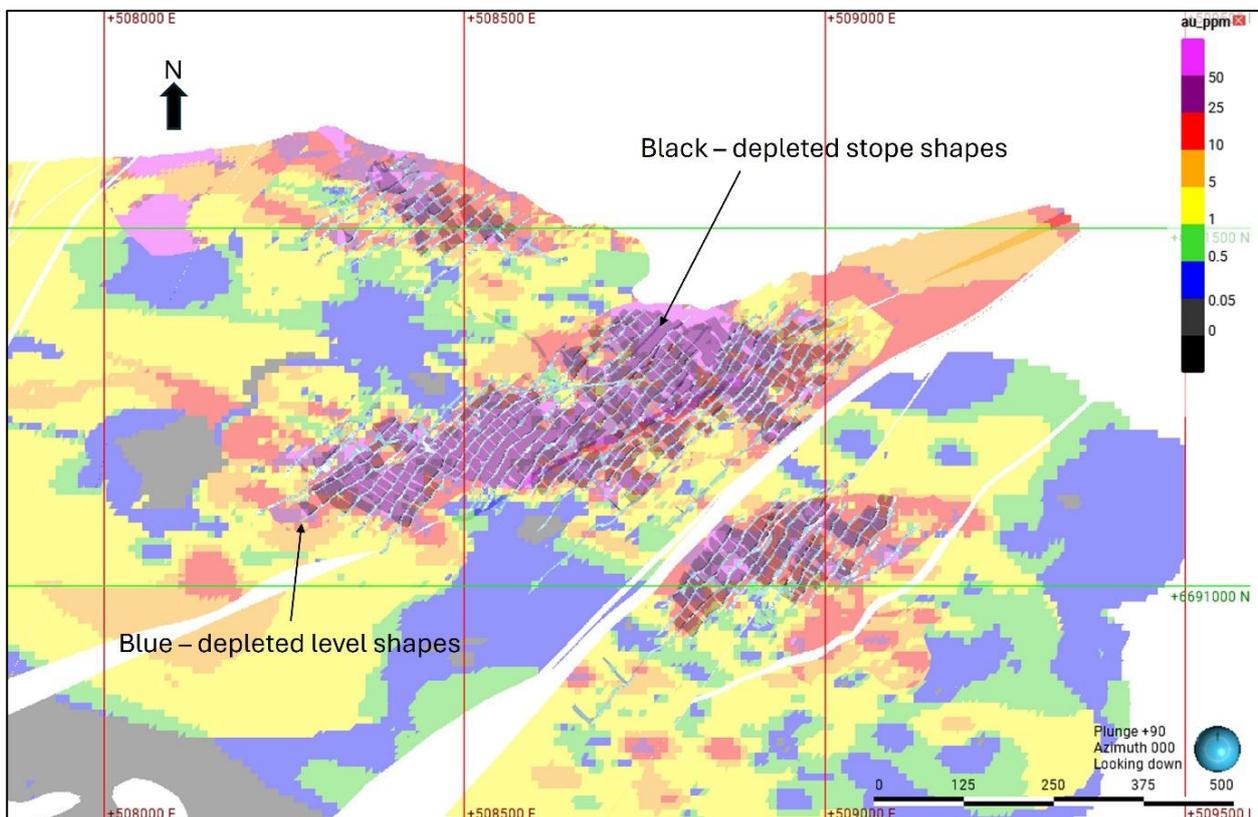
Significant efforts were undertaken by Bara to collate and verify the historical production data from the earlier phases of mining at Nalunaq (see Section 6.6). However, while this allowed a much better appreciation of the material shipped from site to be collated, there were difficulties in obtaining any valid information on the actual material mined. The current depletion wireframes include several development drives and areas, that while in mineralisation, would quite likely have been considered below cut-off grade at the time.

Information on cut-off grade practices used by Crew Gold and Arctic Mining is not available which increases the ambiguity as to how much of this material may have been shipped as ore. Further, there is a reasonable amount of anecdotal evidence that mineralised material mined remains underground in various parts of the mine or has been used in the construction of surface facilities at site, or remains in the dock area, and this is supported by grab samples taken by Amaroq. Therefore, there is an inevitable discrepancy between the tonnage of material removed in the deposit and that actually shipped as ore, which means any comparison of figures is fundamentally not a realistic assessment of the deposit. Therefore, utilising shipment data as an approach to validate the MRE is not deemed to be appropriate.

14.11 Depletion

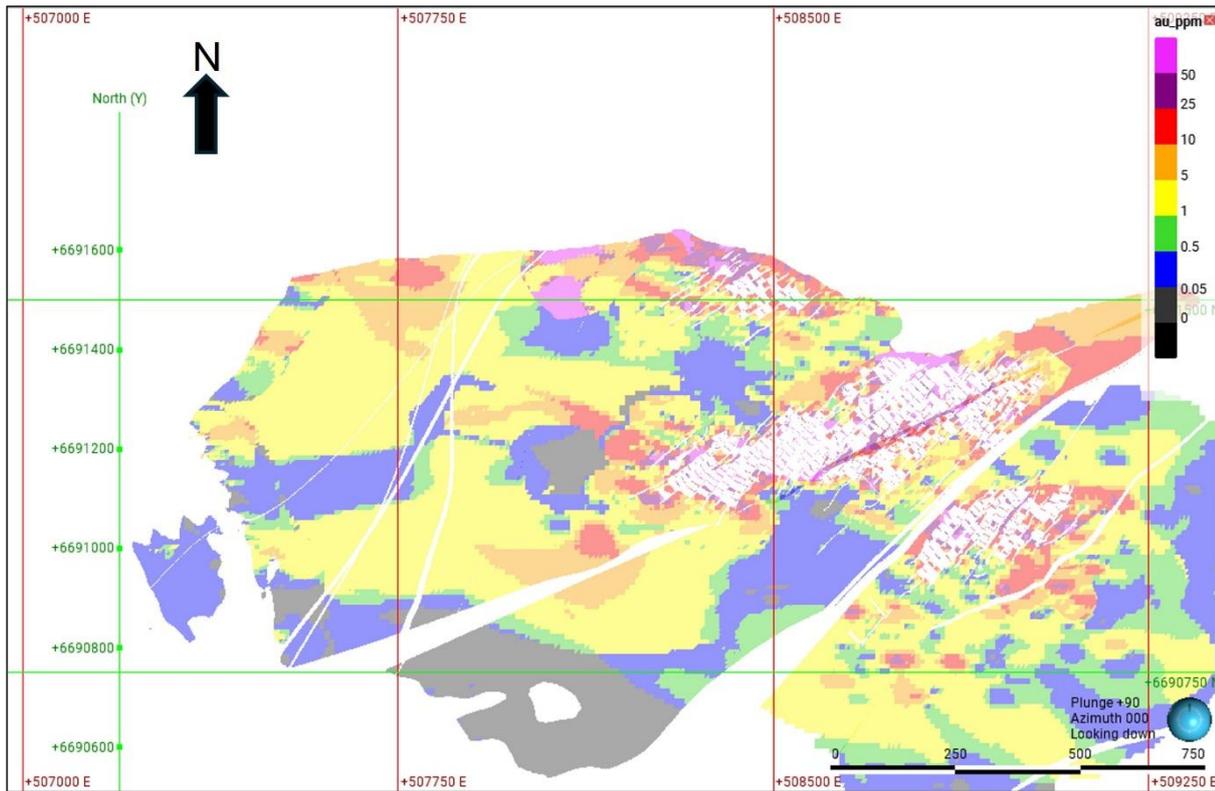
An underground mine survey was carried out in 2025 to update with the development in the Mountain Block region. This was combined with the previous depletion shapes created by SRK and Amaroq, that also included digitising of flooded areas from mine plans, to update an overall depletion model for the 2025 Mineral Resource (MRE4) update (Figure 14-18). No additional stoping had occurred since the previous iteration of the depletion model. The effective date of the MRE is dated as the most recent underground mine survey of 23 February 2025, depleted as shown in Figure 14-19 and Figure 14-20.

Figure 14-18 MRE4 block model (plan view) with depletion shapes



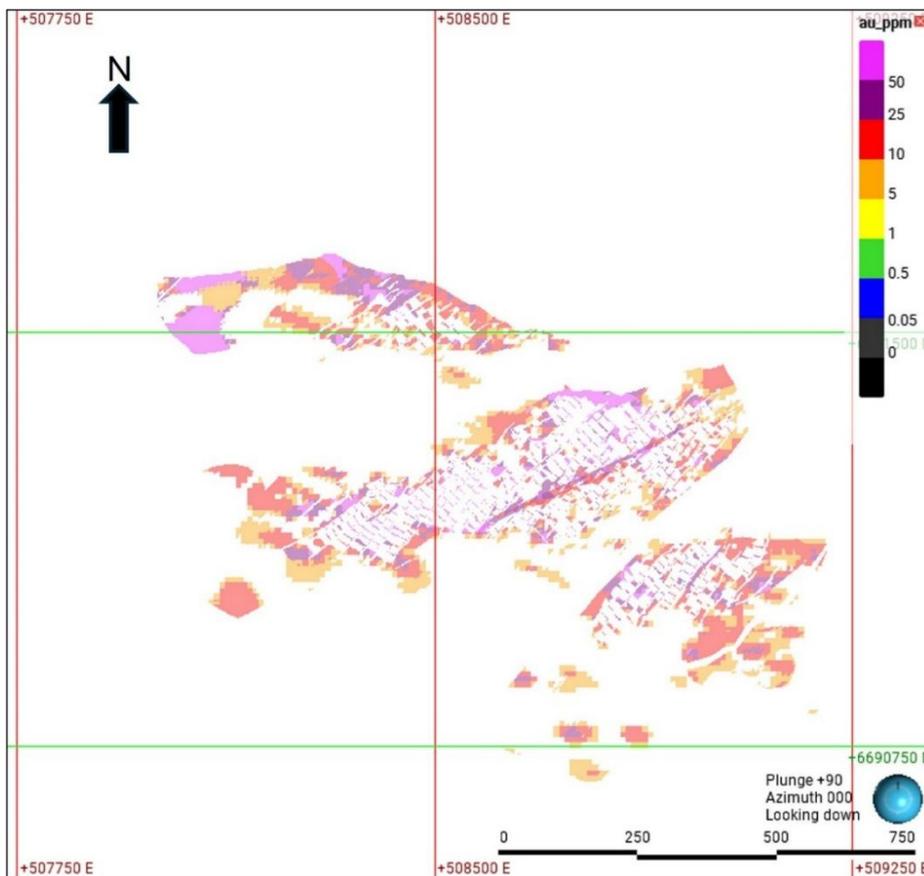
Source: Amaroq

Figure 14-19 MRE4 block showing depletion shapes (no cut-off grade applied)



Source: Amaroq

Figure 14-20 Plan view of the block model as reported in MRE4 (i.e. depleted and above 5.9 g/t Au)



Source: Amaroq

14.12 Mineral Resource Classification

The MRE for Nalunaq has been classified in accordance with the CIM Definition Standards. All material within the estimate is classified as either Indicated, Inferred or Unclassified. The CIM definition of Indicated and Inferred Mineral Resources is included below (CIM Definition Standards, 2014):

“An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.”

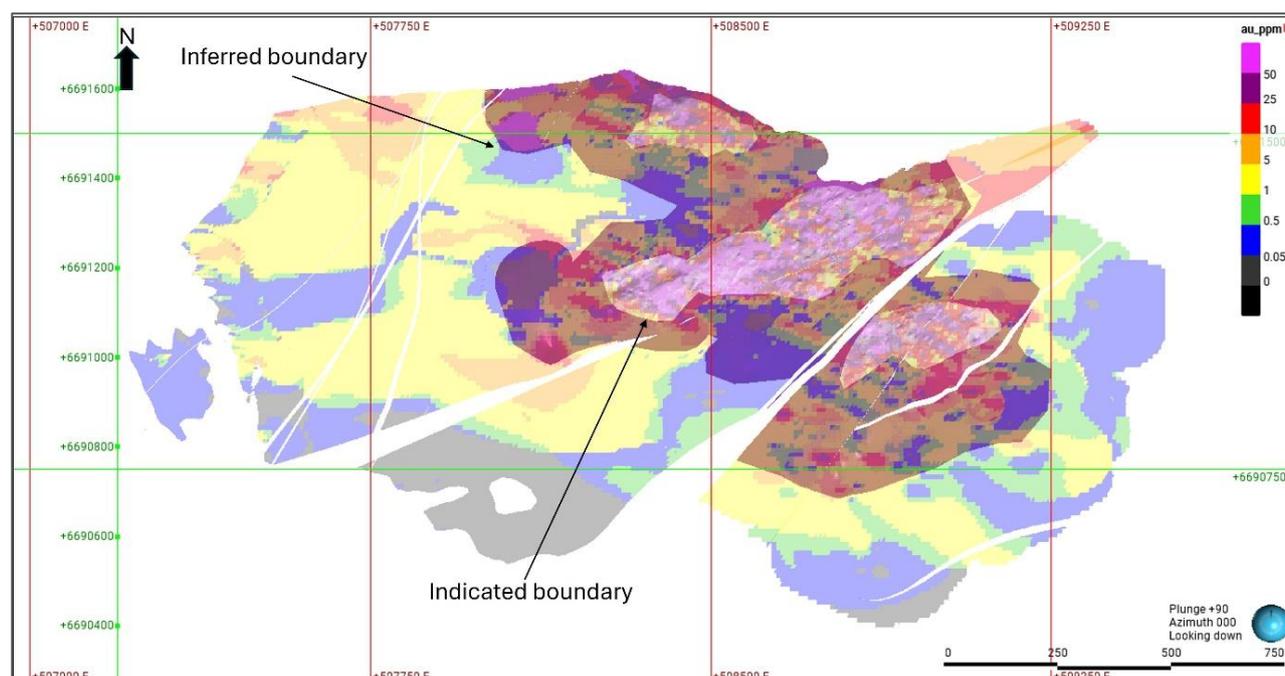
“An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.”

Classification boundaries have been developed and reviewed within Bara, shown in Figure 14-21, based on a number of factors:

- Drilling and production data spacing (i.e. sample data density)
- Geological confidence in mineralisation continuity
- Confidence in data quality (i.e. QAQC, sample type etc.)
- Confidence in the estimation (i.e. kriging efficiency, number of search passes etc.).

The geology, style of mineralisation and grade distribution at Nalunaq is well understood and while there are inevitable challenges and limitations in producing estimates of such a coarse gold deposit, there is high confidence in the continuity of both geology and mineralised structure. Closely spaced (<5 m) production data complements underground and surface drilling intercepts to support the estimation.

Figure 14-21 MRE4 model with classification boundaries (areas outside of Inferred are unclassified)



Source: Amaroq

Classification domains have been developed by Bara based on the following guidelines:

- **Measured:** There are no Measured Resources reported. The lack of raw data for QAQC assessment pre-2015 and reliance on previous MRE and technical reports for this, combined with an imperfect attempt at mine-mill reconciliation for all production area inhibits the confidence in Measured classification at this time.
- **Indicated:** According to CIM Standards outlined above, it was determined that the MRE4 estimate met the criteria to include Indicated Resources, omitted from the 2022 MRE3 update. Indicated Resources for MRE4 were determined by:
 - Within SVOL1 (first search pass) per estimation domain; this generally aligned with the variogram range in the longest axis for most domains and therefore is a geostatistically relevant proxy to base the Indicated boundary on
 - Enclosed previously mined area with high density of data – including production and drilling data
 - Being validated to have a kriging efficiency of >0.4.
- **Inferred:** Areas with sufficient confidence to be classified as Inferred Resources have been determined by:
 - Within SVOL2 search pass (a contiguous shape is drawn and is guided by the second search pass perimeter)
 - Areas of lower data density – whilst providing a valid estimation, domains are not yet of Indicated confidence (i.e. MB HG2)
 - Areas largely based on surface chip samples or isolated drillholes where there is less confidence in geological continuity partially as an influence of less data and data type (i.e. chip samples rather than drill core).
 - Being validated to have a kriging efficiency of <0.4.

The classification status of MRE4 represents the Qualified Persons' understanding and confidence of the geological understanding and mineralisation present at Nalunaq at the time of writing.

14.13 Assessment of Reasonable Prospects for Eventual Economic Extraction

Resources are reported in accordance with the reporting standard, adopted for disclosures at the Nalunaq deposit as defined by the terms and definitions outlined in the CIM Standards on Mineral Resources and Mineral Reserves (December 2005) as required by the NI 43-101 and CIM code. The instruction states that an estimate reported above a cut-off grade “*must meet the test of reasonable prospect of economic extraction*” which has been assessed and presented here in MRE4.

The MRE4 update presented in this report is presented as an undiluted model. After discussions with Amaroq, this was deemed most appropriate for the deposit at this stage of the Project. However, as the Project has begun “trial mining” as a bulk sample, additional data to support potentially diluted future resource models may be discussed in future iterations.

The Mineral Resources presented are not Mineral Reserves and have not been determined as economically viable.

14.13.1 Cut-Off Grade

The block model has been reported above a cut-off grade determined from economic inputs as provided by and discussed with Amaroq. These inputs have been validated and vetted by the Qualified Person and can be found in Table 14-11.

Table 14-11 Cut-off grade inputs

Cut-off grade calculator input data – Resource		Units
Gold price	2,100	US\$/oz
Gold processing recovery	94%	
Royalty	2.5%	
Average ore density	2.96	t/m ³
Average waste density	2.96	t/m ³
Mining cost	178.00	US\$/t
Process cost	113.00	US\$/t
General and administration	72.00	US\$/t
Mined tonnes	99,000	t
Gold payability	100%	

All the modifying factors used to determine the cut-off grade were provided by Amaroq with supporting information that was independently validated by the Qualified Person and where possible re-calculated from first principles based on source data. In all cases, the independently validated values were within a very tight tolerance of the Amaroq values and as such the Qualified Person is comfortable that these accurately reflect the modifying factor assumptions used to underpin the cut-off grade calculation that supports reasonable prospects of eventual economic extraction for the mineral resource.

The gold price was sourced as a consensus of third-party price forecasts and compared to other recent MREs of projects available in the public domain and as such deemed to be appropriate. It is noted that the value used is at a significant discount to the current spot price and rather reflects a longer-term forecast consensus price.

The process recovery is sourced from various metallurgical processing testwork studies undertaken on the deposit and reflects the average consensus on recovery by gravity and flotation as proposed to be utilised at Nalunaq.

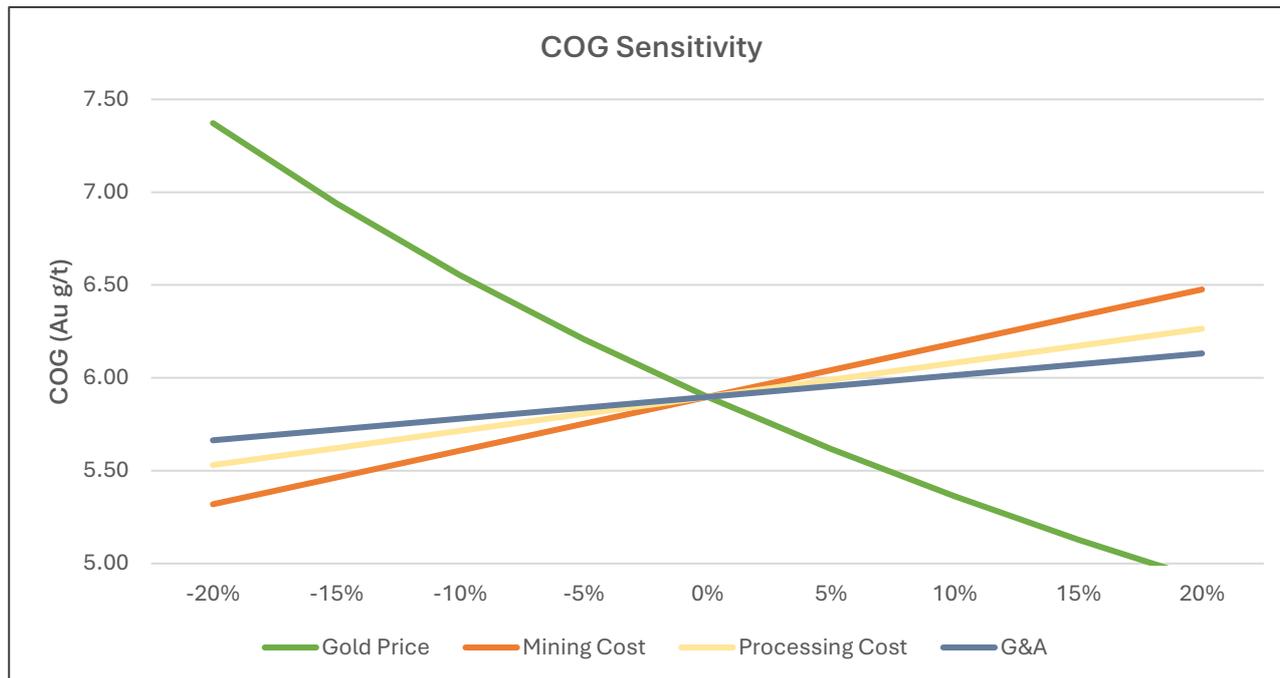
The royalty value was verified against the licence document (license number 2003-05) from the Government of Greenland Ministry of Business, Trade, Mineral Resources, Justice and Gender Equality dated November 2024 and also aligns with information publicly available via the Government of Greenland's website.

Mining costs were verified against an executed contract with Thyssen Mining, and processing costs against a Halyard OPEX study calculation sheet. General and administration costs were checked against the current Amaroq budget forecast for the Project.

As the site runs in Canadian dollars (C\$), a foreign exchange forecast from the National Bank of Canada was used to calculate the cut-off grade in US dollars (US\$).

Cut-off grade sensitivity shows relative sensitivity to gold price, compared to the mining and processing costs (Figure 14-22).

Figure 14-22 Cut-off grade sensitivity graph based on final inputs for Nalunaq MRE4



Source: Amaroq

A cut-off grade of 5.9 g/t Au has been calculated based on the inputs, and a depleted, classified resource is reported above this grade.

14.14 Mineral Resource Statement

The Nalunaq Mineral Resource Statement, 23 February 2025, is depleted to reflect the most up to date available depletion solid, and includes:

- Indicated Mineral Resources of 151Kt at a mean grade of 32.4 g/t Au for 158,000 ounces of gold
- Inferred Mineral Resources of 348Kt tonnes at a mean grade of 29.2 g/t Au for 326,000 ounces of gold
- Total Indicated and Inferred Mineral Resource, reported as depleted and above 5.9 g/t Au at 500Kt tonnes at 30.1 g/t Au for 484,000 ounces of gold.

The MRE4 Bara 2025 Mineral Resource Statement for the Nalunaq deposit is shown in Table 14-12.

Table 14-12 MRE4 Nalunaq Mineral Resource Statement as of 23 February 2025

Classification	Tonnage (t)	Gold grade (g/t)	Gold content (koz)
Indicated	151,500	32.4	158
Inferred	348,000	29.2	326

Notes:

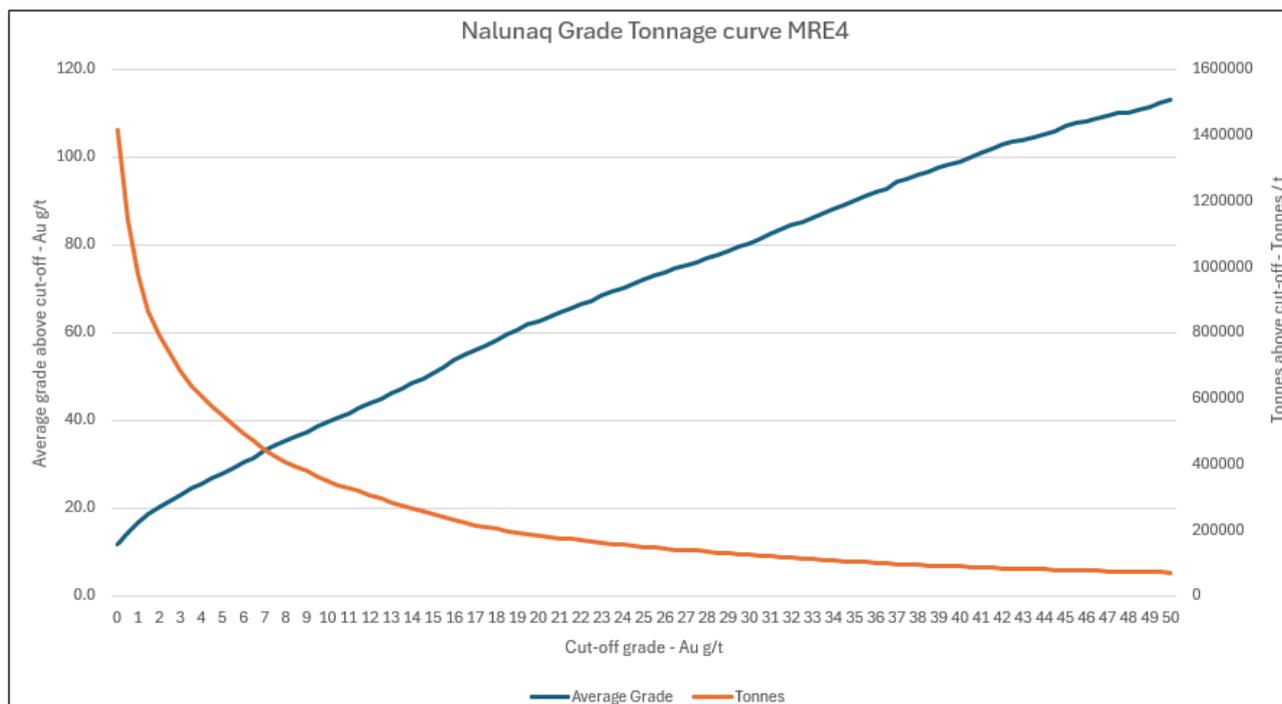
- The above figures are rounded and may therefore not directly align with previous public disclosure by Amaroq Minerals Ltd.
- Mineral Resources as reported above have an effective date of 23 February 2025 and have been depleted to reflect depletion solids received from Amaroq on this date.
- Mineral Resources are undiluted and reported above a cut-off grade of 5.9 g/t Au, using a gold price of US\$2,100/oz, Recovery of 94%, Royalty of 2.5%, mining cost of 178 US\$/t, processing cost of 133US\$/t and G&A cost of US\$72/t. These inputs best reflect the RPEEE, understood by the Qualified Person at the time of writing,
- Mineral Resources are not Mineral Reserves and have not demonstrated economic viability.
- The Qualified Person for the declaration of the Mineral Resources is Mr James McFarlane, MCSM CGeol CEng FIMMM QMR RPGeo FIQ, of Bara. The MREs and accompanying statements were produced and reviewed within the wider Bara team of consultants.

- A site visit was conducted by the Qualified Person in August 2024.
- Mineral Resources are reported in accordance with the CIM Definition Standards.

14.15 Sensitivity Analysis

Due to the high-grade nature of the deposit at Nalunaq, it is relatively insensitive to overall contained metal changes as seen in the grade-tonnage curve in Figure 14-23. Figure 14-23 shows the relationship between grade and tonnage for cut-off grade steps between 0 and 50 g/t Au.

Figure 14-23 Nalunaq grade-tonnage curve



Source: Amaroq

Table 14-13 and Table 14-14 show the tonnes, grade and contained metal (gold koz) for varying cut-off grades and the percentage change relative to the reported Mineral Resource above 5.9 g/t Au.

Table 14-13 Tonnes, grade and contained metal for cut-off grade scenarios

Cut-off grade (Au g/t)	Tonnes above cut-off (kt)	Average gold grade above cut-off (g/t)	Contained metal (Au koz)
0	1416	11.7	533.0
1	980	16.7	526.9
2	792	20.4	518.3
3	687	23.1	509.9
4	607	25.7	500.9
5	548	27.9	492.5
6	495	30.3	483.2
7	444	33.1	472.3
8	408	35.3	463.7
9	378	37.5	455.5
10	349	39.8	446.7

Table 14-14 Percentage changes in cut-off grade scenarios compared to the MRE4 reported resource above 5.9 g/t Au

Cut-off grade (Au g/t)	% Change in tonnes above cut-off	% Change in gold grade above cut-off	% Change in contained metal
0	183%	-61%	10%
1	96%	-45%	9%
2	59%	-32%	7%
3	38%	-23%	5%
4	21%	-15%	4%
5	10%	-7%	2%
6	-1%	1%	0%
7	-11%	10%	-2%
8	-18%	17%	-4%
9	-24%	24%	-6%
10	-30%	32%	-8%

As Table 14-14 shows, a change in reported cut-off grade to 10 g/t Au, results in only an 8% drop in contained metal from the reported 5.9 g/t Au – supporting the relative insensitivity of the deposit to cut-off grade.

14.16 Exploration Target

In addition to the Mineral Resource Statement shown in Table 14-12, an exploration target for Main Vein at Nalunaq has been estimated for the areas of the vein that do not contain enough sample density to provide a sufficiently valid estimate, or are reliant solely on surface channel sample data only. These areas are within the mapped extents of the Main Vein however and therefore have the potential to contribute to future resource estimates should they be drilled to a sufficient sample density.

An exploration target for Main Vein is therefore proposed at between 400,000 tonnes and 1.8 million tonnes at average grades of between 10 g/t and 30 g/t Au. In addition, 75 Vein and other hangingwall structures are approximated between 200,000 tonnes and 500,000 tonnes at average grades of between 10 g/t and 30 g/t Au. This gives an approximate range for the total exploration target at Nalunaq of between 600,000 tonnes and 2.3 million tonnes at 10–30 g/t Au (Table 14-15).

Table 14-15 Exploration Target for MRE4

Area	Million tonnes	Au (g/t)
Main Vein	0.4–1.8	10–30
75 Vein and hangingwall structures	0.2–0.5	10–30
Total	0.6–2.3	10–30

14.17 Comparison with Previous Estimates

MRE4 presented in this report, with an effective date of 23 February 2025, replaces the previous Mineral Resource Statement for Nalunaq, reported by SRK with an effective date of 3 September 2022 and is shown in Table 14-16.

Table 14-16 MRE3 Mineral Resource Statement, effective date 3 September 2025

Zone	Classification	Tonnes (t)	Grade (g/t Au)	Contained (oz Au)
In Mine	Inferred Mineral Resource	140,000	31.0	140,000
Extension Area	Inferred Mineral Resource	215,000	26.0	180,000
Total	Inferred Mineral Resource	355,000	28.0	320,000

Since MRE3, there have been a number of changes to inform the MRE, including:

- **Additional drilling and sampling.** An additional 13,768 m of drilling from 61 surface and 4 underground holes was drilled during the 2022, 2023, 2024 field seasons. Of this, 59 surface holes and 2 underground holes contained samples that informed the MRE for 13,410 m. Samples from two underground holes were not received in time for the data cut-off in MRE4 and two of the 2022 surface holes drilled did not intercept Main Vein.
- **Additional underground face and channel sampling** added an additional 63 channel samples and 274 chip samples – primarily from underground production faces.
- **The use of soft boundaries** with 10 m range on estimation domains, as opposed to hard boundaries, has enabled a more consistent estimation and more appropriate grade gradation between high-grade and low-grade areas.

An increase from 355 kt to 500 kt represents a 41% increase in tonnage from MRE3 to MRE4, and a 51% increase in contained metal (ounces gold). This is largely due to extending the classified areas into areas of additional drilling in the 2022–2024 drilling and sampling campaigns, as well as allowing a continuation of grade between domains due to soft boundary analysis. The latter is felt by the Qualified Person to be more representative of the grade continuity of the vein, given it is largely a single vein system.

14.18 Modern Mineral Resource Estimates

MREs undertaken under the Amaroq tenure of the Project have been identified numerically from the first MRE in 2016 (MRE1) to this latest 2025 MRE (MRE4).

14.18.1 SRK, 2016 (“MRE1”)

SRK ES produced an independent MRE for the Nalunaq Project in 2016 based on all data available. An updated vein wireframe was produced using Leapfrog software, with 3D block modelling and estimation by ordinary kriging methods carried out in Datamine software. The block model was depleted to remove previously mined and inaccessible stopes ahead of resource classification. Stope and development shapes were recreated from data provided by GEUS and confirmed where possible from site visits by SRK ES in 2015 and 2016. The final resource was diluted to a 1.8 m width to reflect the anticipated mining conditions and was split between Inferred Mineral Resources in the area surrounding the historical mine workings (the “Mine Area”) and Inferred Mineral Resources in remnant areas (remaining stopes etc.) which could be practically exploited as part of a larger mining operation (“Remnant Material”).

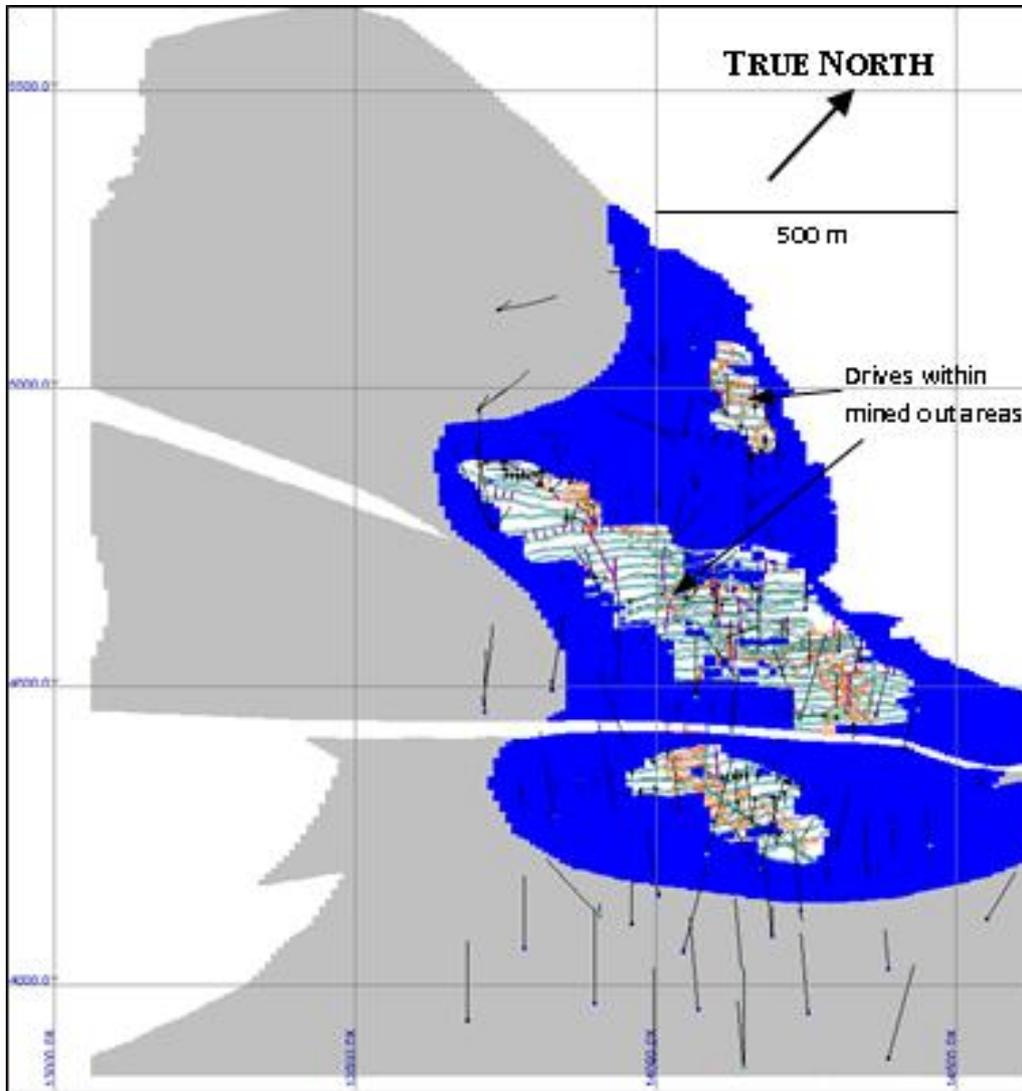
Table 14-17 Summary of the 2016 MRE (SRK ES, 2016)

Zone	Classification	Tonnage (t)	Grade (g/t Au)	Contained gold (oz)
Remnant Material	Inferred	18,900	27.6	16,770
Mine Area	Inferred	428,000	17.9	246,300
Total Inferred		446,900	18.7	263,070

Notes:

- Remaining stopes reported at 5.5 g/t Au, Mine Area reported at a cut-off grade of 5.5 g/t Au.
- Diluted to 1.8 m true width at 0.0 g/t Au.
- Cut off calculated using a gold price of US\$1,300/oz.
- Total refining, transportation and royalties costs of US\$50/oz.
- Total operating costs of US\$200/t.
- All figures are rounded to reflect the relative accuracy of the estimate.
- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- 100% of the Mineral Resource is attributable to Nalunaq A/S.

Figure 14-24 Plan view of Nalunaq workings illustrating the boundary of the Inferred Mineral Resource (blue), unclassified Main Vein wireframe (grey), and depleted areas (white); coordinates in historical mine grid



Source: Amaroq

SRK also produced an Exploration Target of 80 koz gold to 1.2 Moz gold contained within 1 Mt to 2 Mt grading between 2.5 g/t Au and 19.0 g/t Au based on the Main Vein extents known at the time from drilling and surface sampling.

14.18.2 SRK, 2020 (“MRE2”)

Ahead of AEX Gold’s listing on the London Alternative Investment Market (AIM) in 2020, SRK ES produced and updated MRE (“MRE2”). This was based on the geological understanding and data available at the time, and was again tailored to a high-grade plunging ore shoot model. The defined Inferred Resources were split between the Remaining Stopes and Mine Area, as in the previous 2016 MRE. MRE2 is summarised in Table 14-18, reported at a cut-off grade of 6 g/t Au and diluted to 1.2 m true thickness.

Table 14-18 Summary of the 2020 MRE (SRK ES, 2020)

Zone	Classification	Gross			Net attributable			Operator
		Tonnes (t)	Grade (g/t Au)	Contained gold (oz)	Tonnes (t)	Grade (g/t Au)	Contained gold (oz)	
Remaining Stopes	Inferred	26,690	20.8	17,890	26,690	20.8	17,890	Nalunaq A/S
Mine Area	Inferred	396,080	18.3	233,080	396,080	18.3	233,080	
Total Inferred		422,770	18.5	250,970	422,770	18.5	250,970	

Notes:

- Remaining Stopes reported at a cut-off grade of 6.0 g/t Au.
- Mine Area reported at a cut-off grade of 6.0 g/t Au.
- Diluted to 1.2 m true thickness at 0.0 g/t Au.
- Gold price of US\$1,500.
- Total refining, transportation and royalties costs of US\$57.
- Total operating costs of US\$254/t.
- All figures are rounded to reflect the relative accuracy of the estimate.
- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- 100% of the Mineral Resource is attributable to Nalunaq A/S.

14.18.3 SRK, 2022 (“MRE3”)

A third MRE (“MRE3”) was completed with an effective date of 3 September 2022 to update with additional drilling and sampling information as well as depleted to reflect state of mining. The Resource statement for MRE3 was completed by Dr Lucy Roberts MAusIMM (Competent Person) of SRK Consulting (UK) Ltd, as per Table 14-19 below.

Table 14-19 MRE3 dated 3 September 2022 (reported by SRK Consulting (UK) Ltd)

Zone	Classification	Tonnes (t)	Grade (g/t Au)	Contained (oz Au)
In Mine	Inferred Mineral Resource	140,000	31	140,000
Extension Area	Inferred Mineral Resource	215,000	26	180,000
Total	Inferred Mineral Resource	355,000	28	320,000

Notes to the MRE3:

- Mineral Resources were reported in accordance with the CIM Definition Standards.
- Mineral Resources had an effective date of 3 September 2022 and were depleted to reflect the current understanding of the mining completed up to the date when production ceased in 2013.
- Mineral Resources were reported as in-situ and undiluted. The Mineral Resources were reported above a cut-off grade of 5.0 g/t Au using a gold price of US\$1,800/oz gold. Given these parameters, there was considered to be reasonable prospects for eventual economic extraction, fulfilling the requirements for reporting a Mineral Resource.
- The In-Mine Mineral Resource was accessible from the existing underground development while the Extension Area Mineral Resource required development to be put in place for it to be accessed.
- Mineral Resources were not Mineral Reserves and did not have demonstrated economic viability, nor have mining modifying factors been applied.
- The Qualified Person for the declaration of Mineral Resources was Dr Lucy Roberts, MAusIMM(CP), of SRK Consulting (UK) Ltd. The MREs and accompanying statements were produced and reviewed by a team of consultants from SRK.
- SRK noted that a site visit to Nalunaq was conducted by the Competent Person in September 2021.
- All Mineral Resources were quoted at 100%.
- Tonnages were reported in metric units, with metal grades in g/t. Tonnages and grades were rounded appropriately. Rounding, as required by reporting guidelines, may have resulted in apparent summation differences between tonnes, grade and contained metal content. Where those occurred, SRK did not consider them to be material.

15 MINERAL RESERVE ESTIMATES

This section is not applicable to the report.

16 MINING METHODS

This section is not applicable to the report.

17 RECOVERY METHODS

This section is not applicable to the report.

18 PROJECT INFRASTRUCTURE

This section is not applicable to the report.

19 MARKET STUDIES AND CONTRACTS

This section is not applicable to the report.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable to the report.

21 CAPITAL AND OPERATING COSTS

This section is not applicable to the report.

22 ECONOMIC ANALYSIS

This section is not applicable to the report.

23 ADJACENT PROPERTIES

Amaroq current operates 13 exploration licences away from the Nalunaq Mine across southern Greenland. These are held by either Nalunaq A/S (six) a 100% owner subsidiary concentrating on gold exploration, or Gardaq A/S (seven) a 51% controlled subsidiary prioritising the exploration of non-gold critical and strategic metal projects. Collectively, Amaroq operates across 6,849.2 km² of southern Greenland centred on one or other of the Nanortalik Gold Belt, the South Greenland Copper Belt and the Gardar Igneous Province.

Table 23-1 Table of Amaroq controlled exploitation and exploration licences in southern Greenland, Amaroq

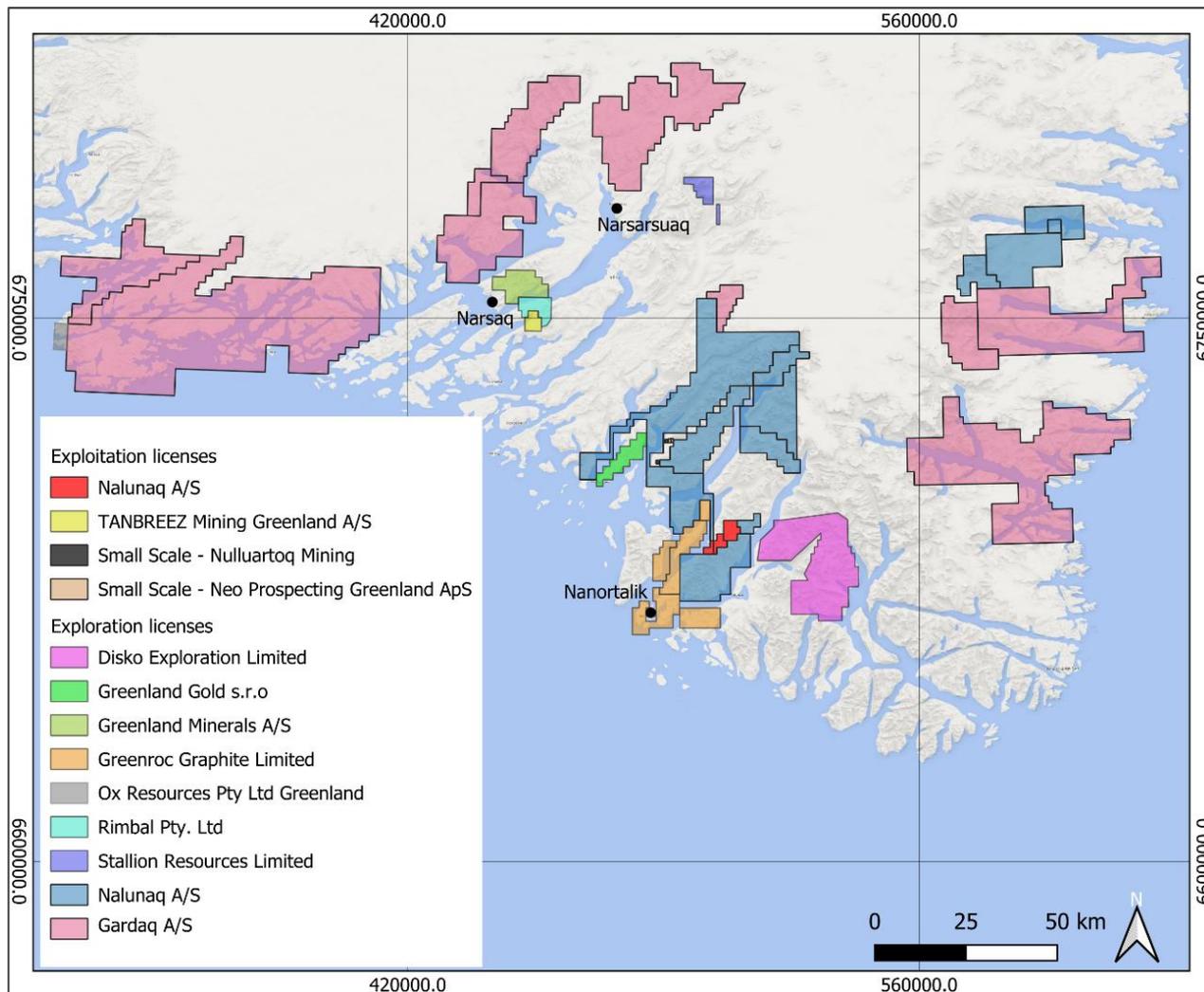
Licence	Holding company	No.	Area	Type	Expiry date
NALUNAQ	Nalunaq A/S	MIN 2003-05	33.7	Exploitation	24 Apr 2033
VAGAR	Nalunaq A/S	MEL 2006-10	221	Exploration	31 Dec 2026
TARTOQ	Nalunaq A/S	MEL 2015-17	78	Exploration	31 Dec 2026
NANOQ (NUNA NUTAAQ)	Nalunaq A/S	MEL 2019-113	244.45	Exploration	31 Dec 2025
ANORITOOQ	Nalunaq A/S	MEL 2020-36	1,184.93	Exploration	31 Dec 2026
SIKU	Nalunaq A/S	MEL 2022-08	251	Exploration	31 Dec 2026
SAARLOQ	Gardaq A/S	MEL 2020-31	63.91	Exploration	31 Dec 2026
NORTH SAVA	Gardaq A/S	MEL 2020-41	332.99	Exploration	1 Mar 2026
SAVA (KANGERLUARSUK)	Gardaq A/S	MEL 2021-02	384	Exploration	31 Dec 2026
STENDALEN	Gardaq A/S	MEL 2021-11	1,377.16	Exploration	1 Mar 2026
KOBBERMINEBURGT	Gardaq A/S	MEL 2022-01	220	Exploration	31 Dec 2026
PAATASOQ WEST	Gardaq A/S	MEL 2023-69	199	Exploration	31 Dec 2027
NUNARSUIT	Gardaq A/S	MEL 2023-70	1,592.52	Exploration	31 Dec 2027
JOHAN DAHL LAND	Nalunaq A/S	MEL 2025-17	666.52	Exploration	1 Jan 2028

Note: Johan Dahl Land, currently held by Nalunaq A/S but under application to transfer ownership to Gardaq A/S.

In addition to the Amaroq controlled licences in the immediate area, there are four adjacent properties to the current Amaroq assets. These, and other licences held across the wider south of Greenland, are illustrated in Figure 23-1 below.

Amaroq is aware of several pending applications within this area, however, information regarding the applying companies are currently not known.

Figure 23-1 Map showing adjacent mineral exploration properties across southern Greenland, Amaroq



Source: Amaroq

23.1 Licence 2013-06 (Greenroc Strategic Minerals PLC)

Centred about 10 km west of Nalunaq, Greenroc Graphite Limited holds a 72.52 km² exploration licence that adjoins to the southern part of Amaroq's Anoritooq licence. The licence is owned and operated by GreenRoc's wholly owned subsidiary, GreenRoc Graphite Limited. The project has a current JORC Resource of 23.05 Mt at an average grade of 20.41% C(g), giving a total graphite content of 4.71 Mt (Greenroc Mining PLC, 2022).

23.2 Licence 2016-13 (Greenland Gold s.r.o.)

Greenland Gold s.r.o. holds a 58.19 km² exploration licence that adjoins to the northern part of Amaroq's Anoritooq licence. It is currently held by a Czech Geological Research Group who is targeting gold mineralisation. 2018 fieldwork reported rock samples with up to 12.46 g/t Au in a quartz vein, but no additional data is available for this property (Greenland Gold s.r.o., 2018).

23.3 Licence 2020-03 (Disko Exploration Limited)

Situated approximately 6 km east of Nalunaq, Disko Exploration Limited holds a 920.16 km² exploration licence. Disko Exploration Limited, a wholly owned subsidiary of 80 Mile PLC, is targeting gold and base minerals within the licence, but no additional information is available for this property.

23.4 Licence 2022-03 (Greenroc Strategic Minerals PLC)

Greenroc Graphite Limited holds a 114.01 km² exploration licence that adjoins the southern part of Amaroq's Anoritoq licence and to the southern part of Greenroc's 2013-06 licence. The licence is owned and operated by GreenRoc's wholly owned subsidiary, GreenRoc Graphite Limited, exploring known graphite occurrences.

23.5 Small-Scale Licences

There are currently four active small-scale licences, "Najukkani aatsitassanut tunngasunik suliaqarnerit" (NATS), situated west of Amaroq's Vagar licence. These licences are held by individuals and are for small-scale exploitation of minerals, predominantly gold. The company names are Nulluartoq Mining and Neo Prospecting Greenland ApS, and no additional data is available for these licences.

The Qualified Person has been unable to verify the information in this section and would state that the information contained herein is not necessarily relative to or indicative of the mineralisation on the property that is the subject of the technical report.

24 OTHER RELEVANT DATA AND INFORMATION

This section is not applicable to the report.

25 INTERPRETATION AND CONCLUSIONS

Nalunaq displays classic attributes of a high-grade, narrow-vein orogenic gold deposit. The Project has a combination of data sources from legacy production data, historical and more recent surface and underground drilling campaigns as well as surface mountain sampling to help delineation of the vein extents as well as grade continuity and tenor assessments.

Bara has produced an updated MRE with an accompanying Mineral Resource Statement as part of this technical report. The Qualified Person for the MRE is Mr James McFarlane, MCSM CGeol CEng FIMMM QMR RPGeo FIQ, alongside colleagues within Bara.

The Nalunaq Mineral Resource Statement is reported above a cut-off grade of 5.9 g/t Au with an effective date of 23 February 2025. The cut-off grade has been calculated based on economic input parameters and the detailed assessment by the Qualified Person and Bara consultants from inputs provided by Amaroq.

The Nalunaq Mineral Resource Statement, 23 February 2025, is depleted to reflect the most up to date available depletion solid, and includes:

- Indicated Mineral Resources of 151,500 tonnes at a mean grade of 32.4 g/t Au for 158 ounces of gold
- Inferred Mineral Resources of 348,000 tonnes at a mean grade of 29.2 g/t Au for 326,000 ounces of gold
- Total Indicated and Inferred Mineral Resource, reported as depleted and above 5.9 g/t Au at 500,000 tonnes at 30.1 g/t Au for 484,000 ounces of gold
- There are no Measured Resources declared.

The MRE4 Bara 2025 Mineral Resource Statement for the Nalunaq deposit is shown in Table 25-1.

Table 25-1 MRE4 Nalunaq Mineral Resource Statement as of 23 February 2025

Classification	Tonnage (t)	Gold grade (g/t)	Gold content (koz)
Indicated	151,500	32.4	158
Inferred	348,000	29.2	326

Notes:

- The above figures are rounded and may therefore not directly align with previous public disclosure by Amaroq Minerals Ltd.
- Mineral Resources as reported above have an effective date of 23 February 2025 and have been depleted to reflect depletion solids received from Amaroq on this date.
- Mineral Resources are undiluted and reported above a cut-off grade of 5.9 g/t Au, using a gold price of US\$2,100/oz, Recovery of 94%, Royalty of 2.5%, mining cost of 178 US\$/t, processing cost of 133US\$/t and G&A cost of US\$72/t. These inputs best reflect the RPEEE, understood by the Qualified Person at the time of writing,
- Mineral Resources are not Mineral Reserves and have not demonstrated economic viability.
- The Qualified Person for the declaration of the Mineral Resources is Mr James McFarlane, MCSM CGeol CEng FIMMM QMR RPGeo FIQ, of Bara. The MREs and accompanying statements were produced and reviewed within the wider Bara team of consultants.
- A site visit was conducted by the Qualified Person in August 2024.
- Mineral Resources are reported in accordance with the CIM Definition Standards.

Key changes in this MRE from the previous (MRE3) can be summarised as follows:

- **Additional drilling and sampling.** An additional 13,768 m of drilling from 61 surface and 4 underground holes was drilled during the 2022, 2023, 2024 field seasons. Of this, 59 surface holes and 2 underground holes contained samples that informed the MRE for 13,410 m. Samples from two underground holes were not received in time for the data cut-off in MRE4 and two of the 2022 surface holes drilled did not intercept Main Vein.

- **Additional underground face and channel sampling** added an additional 63 channel samples and 274 chip samples – primarily from underground production faces.
- **The use of soft boundaries** with 10 m range on estimation domains, as opposed to hard boundaries, has enabled a more consistent estimation and more appropriate grade gradation between high-grade and low-grade areas.

An increase from 355 kt to 500 kt represents a 41% increase in tonnage from MRE3 to MRE4, and a 51% increase in contained metal (ounces gold). This is largely due to extending the classified areas into areas of additional drilling in the 2022–2024 drilling and sampling campaigns, as well as allowing a continuation of grade between domains due to soft boundary analysis. The latter is felt by the Qualified Person to be more representative of the grade continuity of the vein, given it is largely a single vein system that does not exhibit natural hard boundaries.

Bara also notes consistencies with the previous MRE that have been reviewed and deemed suitable for continuation. These include the inclusion of underground and surface chip and channel samples alongside drilling, the use of capping and high-grade clamping to restrict the smearing of higher grade whilst honouring their existence within this high-grade deposit and the continued usage of a density value of 2.96 t/m³ from the data currently available.

26 RECOMMENDATIONS

Bara recommends the following areas for improvement in order to expand the confidence in the geological model and enhance future estimations:

- Hangingwall and footwall sampling around the vein in order to better understand the potential hangingwall and footwall mineralisation tenor allowing a more appropriate approach to dilution around the Main Vein to be developed for mining purposes.
- Additional sampling for density testwork – not only for better density delineation of the mineralised vein but of the hangingwall and footwall immediate to Main Vein also. Additional samples should be considered to quantify the density variability with increased levels of alteration within mineralised vein zones. Additional density testwork should also include additional veins that may become significant as part of future resources and exploration targets such as 75 Vein.
- Review and interrogate reconciliation data – including additional detail in legacy and archived material as well as ongoing reconciliation systems review as the mine goes into production with an active mine-mill system.
- Review previous drilling at Main Vein predicted horizon where mineralisation was not identified and where an intersection was expected.
- Continue re-sampling campaign for hangingwall and footwall structures where previously un-sampled vein material and potential mineralisation occurs.
- Consider estimating a diluted model – this should include a review of the suitability of such a model as the project moves into a production phase as well as the availability and quality of data to support this (i.e. hangingwall and footwall information).
- Studies and work programs to advance towards a maiden Ore Reserve estimate. This will likely include gap analysis of the current information and work programs ongoing for reserve definition and assignment of a suitable Qualified Person to carry this out. In addition, there will be 2025 drilling priorities to assess as well as engineering studies to support. An estimate of costs for these is shown in Table 25-1.

Bara has been made aware of Amaroq's planned exploration activities at Nalunaq for 2025, which is understood to include resource definition in Mountain Block and Target Block and additional drilling in Valley Block. The focus of these areas will be with a view to short-term resource growth and definition with the potential for future Ore Reserve estimate. Additional holes are likely to be undertaken for longer-term resource growth.

This additional data will be complemented by ongoing underground grade control drilling and face sampling which forms part of the mine operating expenditure.

An estimate of expenditure provided by Amaroq for 2025 is shown in Table 25-1.

Table 26-1 Estimated costs for Amaroq's 2025 exploration expenditure at Nalunaq

Area	Total cost (C\$)
Helicopters	302,000
Fuel	49,000
Laboratory	96,000
Accommodation	103,000
Drilling	1,346,000
Technical studies	200,000
Additional	47,000
Total	2,143,000

Note: Estimated costs only and may vary due to rounding.

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APPENDIX A QUALIFIED PERSON'S CERTIFICATE

QUALIFIED PERSON'S CERTIFICATE

**James McFarlane, BSc (Hons), MSc, MCSM, CGeol FGS, FNEIMME,
CEng QMR FIMMM, RPGeo MAIG, FIQ**

Technical Report Title: Technical Report on the Updated Mineral Resource Estimate (MRE4)
of the Nalunaq Gold Mine, Greenland

Issuer: Amaroq Minerals Ltd

Project: Nalunaq Gold Mine

Signature Date: 19 May 2025

In compliance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 (NI 43-101), Companion Policy 43101CP, and Form 43-1010F, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards – For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted by the CIM Council on 10 May 2014 9 (Part 8 CERTIFICATES AND CONSENTS OF QUALIFIED PERSONS FOR TECHNICAL REPORTS).

I, James McFarlane confirm that I am the Qualified Person for the Report and:

- a) I James Andrew Stuart McFarlane, residing at 15 Endsleigh View, Ivybridge, Devon, UK hold the occupation of Principal Consultant (Mining & Geology) with Bara Consulting Ltd.
- b) In regards to the Technical Report on the Updated Mineral Resource Estimate (MRE4) of the Nalunaq Gold Mine, Greenland with an effective date of 12 May 2025.
- c) I hold the following academic qualifications:
 - BSc (Hons), Environmental Earth Science, University of Wales Aberystwyth,
 - MSc, Mining Geology, Camborne School of Mines (University of Exeter).
- d) I hold the following professional memberships in good standing:
 - Fellow and Chartered Geologist of the Geological Society of London (FGS, CGeol),
 - Fellow of the North of England Institute of Mining and Mechanical Engineers (FNEIMME),
 - Fellow, Chartered Engineer and Qualified for Minerals Reporting of the Institute of Materials, Minerals and Mining (FIMMM, CEng, QMR),
 - Member and Professional Registered Geoscientist in the fields of Mining and Mineral Exploration of the Australian Institute of Geoscientists (MAIG, RPGeo),
 - Fellow of the Institute of Quarrying (FIQ).

- e) I have practiced my profession continuously since graduation and have spent 7.5 years working in active orogenic gold projects and have worked on numerous others worldwide as a consultant in relation to exploration, mining and Mineral Resource estimation.
- f) I personally inspected the property between the 6 August 2024 and 10 August 2024.
- g) I am responsible for Sections 1 and 3 of this report as author and all sections as a reviewer and Qualified Person.
- h) I am independent of the issuer applying all the tests in section 1.5 of NI 43-101.
- i) I have not had prior involvement with the property that is the subject of the Technical Report.
- j) I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- k) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report including summaries and extracts. I have read the document and am of the opinion that it fairly and accurately represents the information in the technical report that I am responsible for.

Signed:



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